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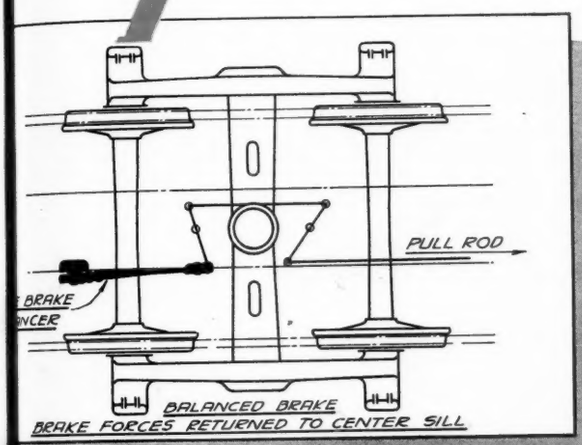
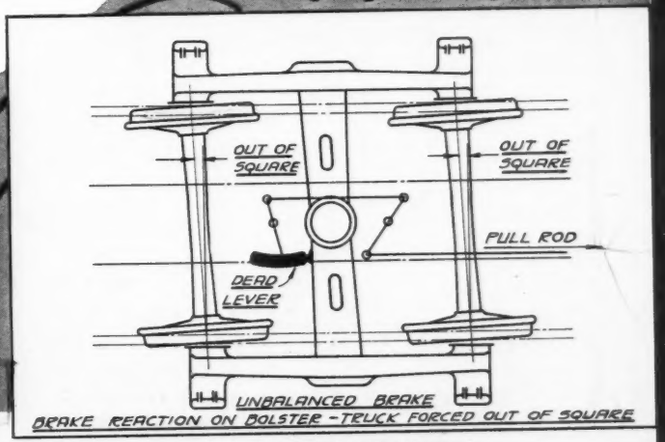
Equalized brakes

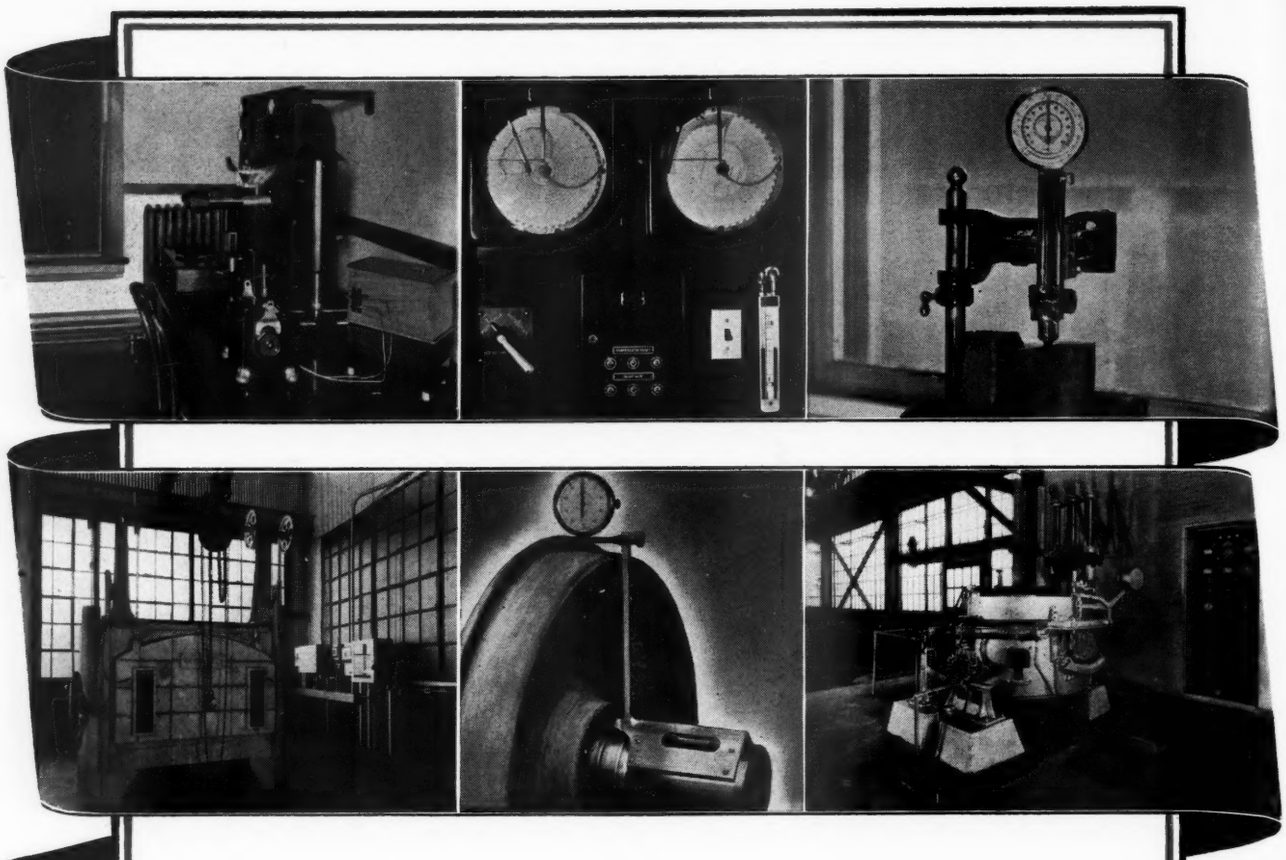


WHEEL MILEAGE INCREASED

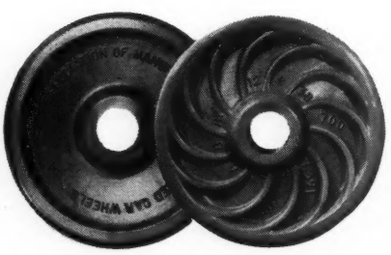


Wine BRAKE BALANCER

THE WINE RAILWAY APPLIANCE CO. TOLEDO, OHIO



Beyond the "Duration"



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An illustrated article describing the grade separation project recently completed by the D. L. & W.—Twenty-three grade crossings were eliminated, two miles of line were elevated and a new passenger station constructed.

Freight Claim Division Celebrates Semi-Centennial . . 905

A report of the proceedings at the annual meeting of this organization, at which the problems facing freight claim and loss and damage prevention officers were discussed.

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The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service

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Install "UNION" FACING POINT LOCKS ON SPRING SWITCHES

SPRING switches at passing sidings, ends of double track or at junctions will eliminate train stops. Equipping the spring switch with a facing point lock will eliminate speed restrictions ordinarily imposed on trains moving in the facing point direction and this justifies more frequent use of spring switches.

On one railroad, 42 spring switches, F. P. L. equipped, saved 74,277 train stops a year. The improved train operation resulting from the train stops saved, and from freedom of speed restriction, was the equivalent of a saving of 25,970 car days per year.

This is another example of how relatively simple protective equipment will greatly speed rail transportation with a minimum use of new material. Our nearest District Office will be glad to furnish complete information. » »

2041

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SWISSVALE, PA.

The Week at a Glance

WHENCE FEDERAL CONTROL: Experience indicates that *federal control of railroads is no danger so long as there is no car shortage,* but it is a very great danger when there is such a shortage—especially if there are any plausible grounds for blaming the shortage on private managements. Such is the analysis of the situation respecting railway capacity in the leading editorial herein. It follows that (1) superhuman effort and ingenuity need to be exerted to prevent a shortage from developing, or to minimize it if it does occur, and (2) the facts now available as to why the danger of a shortage has arisen should be made known to the public—so that, if a shortage occurs, those who caused it, rather than innocent people, will have to accept the blame.

●

EFFICIENCY MUST RISE: The parsimony of the War Production Board in allocating materials for railway equipment is the immediate occasion for concern about railroad capacity—granting the possibility, of course, that the board may know of needs for steel for war purposes more urgent than the requirements of the carriers. But, even if the equipment-building program could be expanded, the need for the greatest ingenuity in getting the very utmost of service out of existing plant and equipment would not disappear. *Acceleration of the rate of increase in railroad efficiency is the need of the hour.*

●

EQUIPMENT LACK: F. G. Gurley, in a paper published herein, summarizes the equipment program the railroads asked for and what they are going to get—the upshot being that this coming fall they will be shy 26,000 freight cars and an indeterminate number of locomotives, under the estimate they made of their needs last December. With due credit to the responsibility of the war production board, Mr. Gurley makes clear how vital it is that this Board be brought to an understanding of the connection of railroads with war production. This is true of new equipment, but it is especially important in the case of repair parts. If these do not come through on a better basis than now provided, the question will shift from one of increasing railroad capacity and center on maintaining that which already exists. Mr. Gurley questioned the desirability of decelerating freight train schedules and of continuing "make work" practice.

●

RAPS "MAKE WORK" LAWS: Train limit and "full crew" laws, and other state legislation such as that requiring continuance of poorly patronized passenger service, should be relaxed for the duration—so ODT Director Eastman recommended to the conference on "trade barriers" in Washington on May 5. He also rapped the railroads and their employees for their alleged part in securing legislation limiting size and weights of motor vehicles. Asked why the ODT didn't do something to override these truck laws, Mr. Eastman indicated that state officials were pretty vigorous in their determination to continue these controls—which, perhaps, may suggest that somebody has sold Mr. Eastman a bill of goods in inducing him to believe that these highway laws are designed to be merely restrictive rather than to conserve the highways. If the laws hadn't anything to do with reasonable highway protection—as propaganda against them insists—why would state officials insist so vigorously on their retention?

●

PROTECTING BARGE LINES: Joe Eastman doesn't want the railroads making rates to take traffic away from inland waterway carriers. The idea seems to be that, while railway competition for such tonnage is economically sound in ordinary times, the war may make it necessary to use everything there is to move freight in before we get through—and so the scows ought to be left with whatever traffic will put up with their slow service, to free the rails for tonnage which needs, and appreciates, real transportation.

●

MANPOWER OUTLOOK: The ODT estimates that the railroads will have to put on 117,000 new jobs before the close of the year and that they will lose 167,000 employees by resignations and dismissals. Add to these an estimated 22,000 draftees who will have to be replaced and 14,000 extra employees to take care of vacations—and the grand total is 320,000 new employees who will have to be taken on in the next seven months. Looks like a job of hiring—or, rather, finding. The selective service is helping some by qualifying 79 railroad occupations as deserving of deferment. Further details are given in the news pages herein.

●

RR ARMY MEN: Colonel Carl R. Gray, Jr., who goes into active duty on May 15 as head of the Military Railway Service, has made public the initial list of officers, drawn from the railroads, of the army railroad service. The list is published in the news pages herein.

●

AGREE ON FORWARDERS: Conferees have finally agreed on a measure for forwarder regulation and have filed their report in the House. The bill would not prohibit other carriers from controlling forwarders, but it would forbid carrier officers from personal investments in such enterprises. The forwarders and trucks would be given 18 months to abandon their much-criticized joint-rate arrangements—and the proposed prohibition of forwarder rates at levels lower than those of common carriers is out. As our report in the news pages herein describes it, there is "something like a commodities clause" in the conference bill, which would put a crimp into shipper control of forwarder companies without express I. C. C. permission.

●

SYRACUSE TRACK RAISING: 23 grade crossings in Syracuse, N. Y., have been eliminated by the Lackawanna with a 2-mile track elevation project which is described and illustrated elsewhere in these pages. A new passenger station is included in the program.

BARGING IN AGAIN: Some people's panacea for almost any national military, economic or social ill seems to be "Build a river or a barge." In Congress, there are several statesmen who are figuring on ways to get more ditches and scows for their constituents, in the guise of solving wartime transportation problems. Our information is that, in the allocation of scarce materials for transportation equipment, the barge addicts are not without their ardent supporters. When a ton of steel moves goods by river it works on a circuitous route at 2 or 3 miles per hour. If the same ton of steel goes into railroad equipment, it works at 40 m. p. h. on a direct route. But try to explain that to a canal fanatic!

●

FORESTALLING COAL FAMINE: In the April 25 week coal loadings increased 1,300—and bituminous production in that week was 11½ million tons. Luther Harr, bituminous "consumers' counsel," is happy about this production rate, as indicating satisfactory public response to the "Buy Coal Now" campaign. He says that, if coal production can be kept at 11 million tons a week during spring and early summer, "possibility of a coal shortage next winter will be virtually eliminated." Let's keep up the good work.

●

McCARTHY SUCCEEDS TURNEY: Henry McCarthy, associate director of the ODT Division of Traffic Movement and on leave as passenger traffic manager of the Boston & Maine, has been appointed director of that division, succeeding John Turney, who has been placed in charge of the new Division of Transport Conservation. This new division will have a lot to do with the control of the use of private automobiles, which the government promises to move in on henceforth with an increasingly heavy hand.

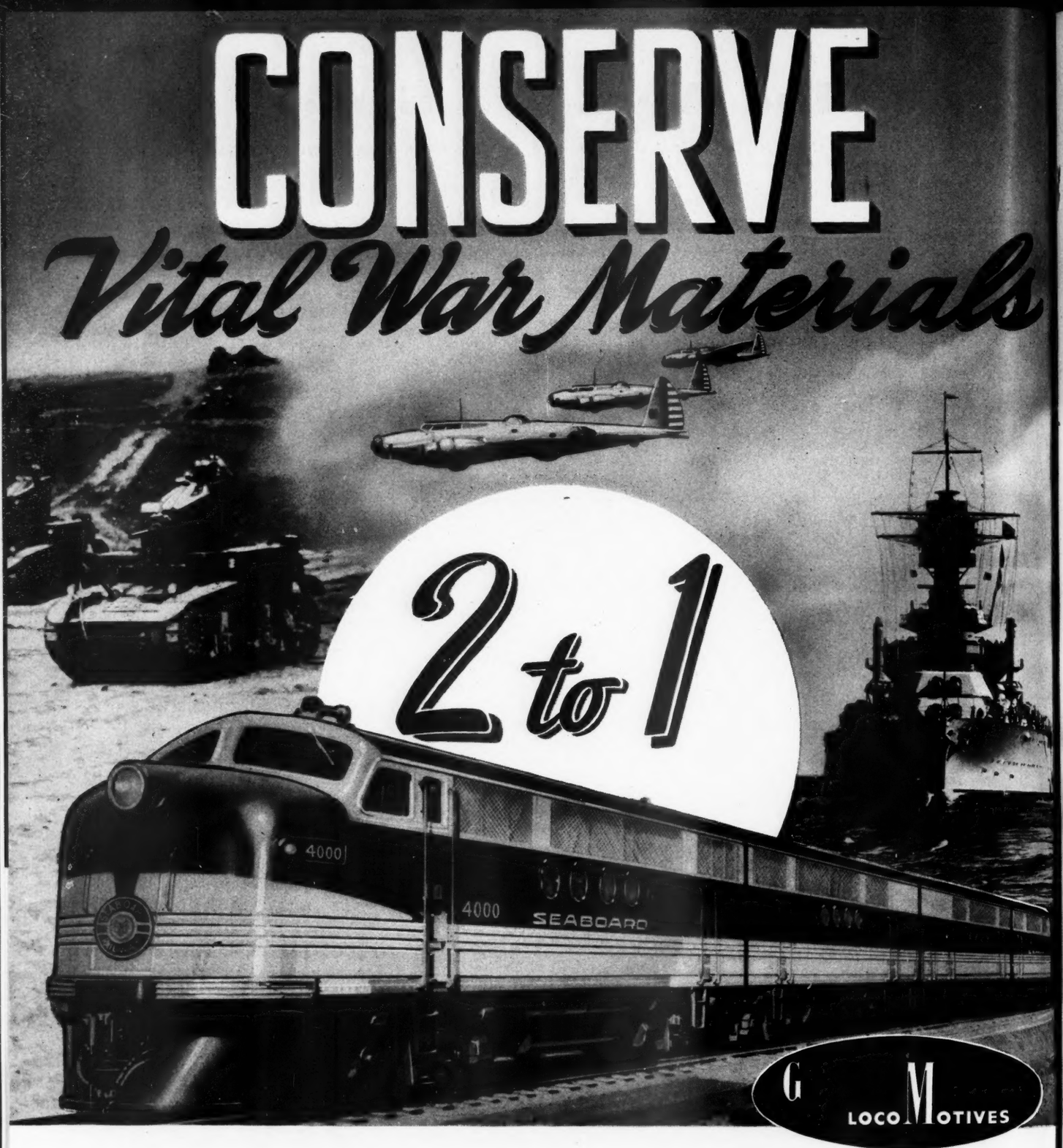
●

TRUCK UNION RACKETS: Director Eastman of the ODT has given his support to pending legislation which would apply existing anti-racketeering laws to union goons who, by intimidation, hold up trucks at the edge of cities and make them pay wages for additional and unneeded employees—often, even, collecting such tribute without even supplying the unwanted help. Mr. Eastman favors a $5,000 fine and two years in storage for miscreants guilty of such practices; and he would empower the President to call out the armed forces, if necessary, to put down such gangsterism in hindrance of interstate commerce.

●

LETTERS ON LABOR: There are a couple of important letters on personnel questions on the "communications" page in this issue. One is from Captain Otto Beyer, commenting on our recent editorial on the union-management "co-operative" plan on the B. & O. Another letter reports a "make work" condition which cannot be doing the war effort any good. Such restrictions are not in the national interest and need to be relaxed, and a co-operative attitude on the part of organizations composed of patriotic railroaders ought to be the path to that goal.

CONSERVE
Vital War Materials



THE tremendous task now facing industry — and this includes the railroads — is how to build more and more and how to deliver war materials to required points — and this demands the utmost in productive capacity and economy.

Ordinary production is not sufficient.

Economy in the use of the nation's resources — making every pound of essential materials go as far as possible — is most vital to America's VICTORY program. Railroads operating General Motors Diesel Road Locomotives are increasing the carrying capacity of existing track facilities without expensive replacements with heavier rail or rebuilding of bridge structures.

And in the construction of GM Diesels, one ton of materials does the work of more than two tons of materials in a steam locomotive.

WHO SERVES THE RAILROADS—SERVES AMERICA

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION — LA GRANGE, ILLINOIS, U.S.A.

Cooperative Prevention of Transportation Shortage

The *Railway Age* repeatedly has given in detail the facts showing why the War Production Board's allocation of materials for the railways threatens to cause a shortage of needed transportation, and has criticized and deplored it as much as anybody. The railways, with the splendid co-operation of shippers, including representatives of government handling its shipments, have thus far during the defense and war effort made an almost perfect record of good and adequate service; and if possible that record must be maintained.

Efficiency Increase Is Imperative

But there are other important facts which must not be ignored. One is, that, while the War Production Board apparently does not realize the railway situation that may be created, it must know better than any other person or agency **all** the military needs and demands there are for materials. Another is, that, whether allocations for the railways are increased or not, there is going to be need for a rapid and great further increase in efficiency in every factor of railway operation and maintenance if, with the labor and facilities that will be available, the railways are to continue meeting all demands on them, or even all that may be considered reasonable.

The prospective situation presents a great problem, but also great opportunities, to all who can contribute to its solution. And those who can make real and substantial contributions include not only the War Production Board, the Office of Defense Transportation, railway managements, shippers and passengers, but also every railway divisional and supervisory officer, every railway labor union leader and employee, and every manufacturer who has sold equipment or supplies to the railways or may have a chance to do so. The railways had a large surplus capacity when the defense program was begun two years ago. If, however, railway managements and shippers had used only previous methods, this surplus capacity would have been exhausted by the increases of 60 per cent in railway passenger traffic and of 45 per cent in railway freight traffic that have since been handled.

That these unprecedented increases have been satisfactorily handled, and that there still remains surplus capacity, are due to the finest example of effective voluntary industrial co-operation, first, between the railways themselves, second, between them and the shippers, that ever have been afforded. Hardly anybody realized two years ago how much potential railway capacity there was. Its existence has been disclosed, and it has been converted from a potentiality into an invaluably effective force, by improvement of old and use of new methods. And still nobody knows how much potential railway capacity there is, and, therefore, how much surplus capacity is yet available. This will be determined only if and when all who can contribute, shall contribute all they can toward making the remaining potential capacity effective.

Duty to Keep Public Informed

The primary responsibility, of course, is that of railway managements. Each of them must utilize its every resource of research, of planning, of direction and supervision, of appeal for local public understanding and co-operation. The situation may change from one in which there can be cited a long record of complete service to one in which there will have to be anticipated and explained a much larger, but incomplete service. Every effort should be made to avoid this change. If it cannot be avoided, and public inconvenience results, then every reasonable effort should be made to prevent this from causing an adverse change of public sentiment.

There never was a time when public sentiment toward private management of railways was so favorable. This is mainly due to improvements in service within recent years. But it is also very largely due to the public relations and advertising activities of individual railways and the industry as a whole by which the public has been kept informed of these improvements, of how they have been accomplished, and of all problems of the railways and the means of solving them. All experience shows that the industry needs advertising and public relations work much less to gain public favor

when there is not enough traffic than to retain public confidence and co-operation when there is more traffic than can be satisfactorily handled.

Car Shortages Invite Trouble

There have been numerous threats of government operation, and actual adoption of it once, because of car shortages. There has never once been a threat of it when there has been a car surplus. These are facts of history which, we believe, have never been emphasized before, but should be strongly emphasized now, because of such great importance and significance for those trying so to mold railway policies as to prevent any demand for government operation. Those shaping railway policies can no more safely refrain from efforts to prevent a shortage of transportation from having adverse effects on public sentiment, than they could afford to refrain from efforts to prevent the shortage itself.

A good example of the kind of advertising and public relations activities that should be carried on in anticipation of a shortage of transportation, and during it if one develops, is afforded by an advertisement now being published by the Illinois Central over the signature of President Beven. It is entitled "War Sets New Test For Railroads" and, among other things, says:

> "We all realize and agree that the needs of war come first—in transportation, as in everything else. When it becomes necessary to divert materials from transportation in order to insure an uninterrupted flow of war production . . . it becomes our duty as patriotic citizens to face the situation ahead of us and alter our plans accordingly. It means that all of us engaged in railway transportation—shippers and travelers and railroaders alike—have got a harder job to do with fewer and less adequate tools than we had anticipated. . . . Our answer is that we'll buckle down and do our very utmost to meet the requirements. The job is simply harder, not impossible."

An important and significant achievement of the railways in their determined effort to provide all the service demanded, regardless of conditions and difficulties, which has not been emphasized enough is the increase they have made in the supply of serviceable locomotives and freight cars by reducing the number in bad order. On June 1, 1940, when the government began its defense program, there were on railway lines 1,613,130 railroad-owned cars of which 163,904, or 10.2 per cent, were in bad order, and, of which consequently only 1,449,226 were in serviceable condition. On June 1, 1941, the number owned had increased to 1,622,181, while the number in bad order had been reduced to 94,415, or only 5.8 per cent of the total. As a result, although the number acquired had exceeded the number that had had to be scrapped by only 9,051, the net increase in the number in condition for service was 78,540, or almost nine times as much.

Until recently, when only 5 per cent of a railway's cars were in bad order, it was considered to have its equipment in good condition. On April 1, 1942, the number of railroad-owned cars on line had increased to 1,696,138, or about 83,000 more than on June 1, 1940; and if 5 per cent had been in bad order the number of cars in serviceable condition would have been only 1,611,331. But, in fact, the number in bad order had been reduced to the unprecedentedly low figure of 3.5 per cent, or only 60,203, the result being that the number in serviceable condition was 1,635,935. Thus in less than two years from June 1, 1940, to April 1, 1942, the supply of serviceable cars was increased almost 187,000, of which increase 104,000, or 56 per cent, was due to repairing or even rebuilding many cars the reconditioning of which, excepting for the emergency, would have been deemed much too expensive to be justifiable.

Repairs the Principal Source of Increased Equipment Supply

Comparisons of the former and present supplies of locomotives are more difficult to make because old locomotives that must be scrapped have much less capacity than new locomotives with which they are replaced. However, allowing for this difference, there has been a comparable increase in the effective supply of locomotives by reduction of the number in bad order. On June 1, 1940, the total number was 40,460, of which 6,781, or 16.8 per cent, were in bad order, and 33,679 were serviceable. On June 1, 1941, the total number was 39,481, of which 5,181, or only 13.1 per cent, were in bad order, and 34,300 were serviceable. On April 1, 1942, the total number was 39,291, of which 3,228, or only 8.2 per cent, were in bad order, and 36,063 were serviceable. Thus, in spite of a small decline between June 1, 1940, and April 1, 1942, in the total number of locomotives, there was, because of reduction of the number in bad order, an increase of 2,384 in the number in serviceable condition.

Rolling Stock's Antiquity Hasn't Helped

In view of the circumstances, these increases in the supplies of serviceable locomotives and freight cars, so largely due to reductions of the numbers in bad order, were remarkable. For it must be remembered that the average ages of both locomotives and cars were much greater than before the depression, which largely increased the task and cost of putting so many of them into serviceable condition. The unprecedented increases in railway efficiency and output have been due not only to greatly increased efficiency in using equipment, but also to widespread and skillful employment of unprecedented expedients and expenditures in making facilities serviceable which, before the present emergency, would, for reasons of economy, have been retired to the scrap pile.

The inability of the railways and railway equipment and supply manufacturers to get enough of the kinds of materials heretofore used by them for expanding and maintaining railway properties presents problems —and also opportunities. The railways must adopt

many expedients and materials "for the duration" that they have not heretofore used; and the manufacturers can help them do this. The manufacturers naturally know their own products best, and can help their railway customers greatly by devoting more effort to showing railway officers how better to utilize and prolong the life of these products. The manufacturers can in many cases show railway officers how and where they can substitute other methods for those heretofore employed in doing specific tasks. They can also provide substitute materials for those that have become scarce or unavailable. They can redesign many of their own products to reduce or eliminate the necessity for using scarce materials.

Furthermore, many manufacturers who have not heretofore been selling to the railways now have opportunity to do so because their plants and organizations are adapted to the production of devices made of non-critical materials—as, for example, of wood instead of metal. Railway officers, however alert they may be and however much research they may do, cannot be expected to know all the sources from which such devices and materials are obtainable; and manufacturers of them will, therefore, have to employ the usual means of advertising and selling if they are to help the railways, and, incidentally, enlarge their railway markets.

After every practicable effort has been made to maintain railway properties and enlarge their capacity, there will still remain need for the utmost co-operation by shippers and the public in order to enable the railways to render the greatly increased service that shippers and the public will desire and need. And the possibilities of shippers and the public helping increase the output of rail transportation, fortunately, are as yet nowhere near exhausted.

For instance, average ton-miles per locomotive and freight car can still be largely increased by loading and unloading cars more expeditiously, and, especially, by increasing average loading per car. The average capacity of freight cars in February was 50.43 tons, while average load per loaded car was only 29.1 tons, or but 58 per cent of capacity. In other words, over 40 per cent of average capacity was not utilized.

Some Cars Are Too Lightly Loaded

Now, of course, some commodities, such as ore and coal, usually are loaded to the capacity of cars; and there are many commodities which cannot be so loaded

Time Now to Hit the Ball

The best way for the railways to assure themselves that they get their economic share of the nation's post-war traffic is to demonstrate their utmost resourcefulness in handling both military and civilian traffic *now*. There are other steps, also, needed in the attainment of their post-war goal, but the aforementioned is the all-important one.

Alvin Vogtle, president of the National Association of Shippers Advisory Boards, made some recent observations on this question which are much to the point. He said in part:

"We simply cannot load a car to half capacity and ask for diversion of critical materials from the war effort to build a new car, likewise to be loaded to half capacity, when the existing car would accommodate both loadings. The immediate armament needs are too urgent.

"And we now come face to face with the acid test of voluntary co-operation. I refer to the recent action by the government in taking over control of production and deliveries of new cars and new locomotives. We must accelerate our program and quickly adapt ourselves to these new circumstances. The transportation plant must be utilized more efficiently, regardless of inconvenience and handicap, or inevitably we will experience the disaster of a transportation shortage.

"It is my belief that nothing short of perfection in utilization of the transportation plant will suffice in the urgent war effort and that we should forthwith insist on an intensification of the program:

(1) That all cars be loaded to maximum axle carrying capacity or full visible capacity; and that there be immediate revision in units of sale, in trade practices, and in governmental regulations inconsistent therewith.

(2) That there be no detention beyond 24 hours in the loading and unloading of cars.

(3) That the railroads in turn should now gear their operations to this program.

We should furthermore re-emphasize and insist:

(4) That seasonal movements be spread and inventories of available materials be accumulated in light traffic periods to reduce the peak tonnage usual to the fall months.

(5) That there be an immediate terminal-by-terminal study to improve switching efficiency and yard operation, through careful joint planning by shippers and railroads of the day's work.

(6) That there be an immediate country-wide study of cars in intra-plant and intra-terminal service for curtailment where practicable, and for greater efficiency where continuance is necessary.

(7) That receivers of freight *must* remove dunnage and debris from car to avoid delay of shifting dirty cars to railroad cleaning track.

"It is interesting in the long range to contemplate the reduction in railroad costs through more efficient utilization of the transportation plant, with ultimate benefits to the shipper in truly low-cost mass transportation.

"All must unite to prevent dictation, conquest, or supremacy by other nations. If our voluntary program fails, then government compulsion, with its imperfections and lack of flexibility, is inevitable."

It is not possible to load all cars to either weight or cubical capacity—a fact which Mr. Vogtle doubtless fully realizes. Aside, perhaps, from amplification of this point, who can suggest that his program is not fully sound? If the entire shipping and railroad fraternity had the earnestness and inspiration of such leaders as the shippers boards' national president, this industry would see some near-miracles in the next six months. Your observer's not-wholly-uninformed guess is that this is just what it is going to see.

as to use full capacity. But when, on the average, all cars are loaded to less than 60 per cent of their average capacity, it is evident that railways and shippers can so co-operate in further increasing the loading of many commodities as greatly to increase the ton-miles of service rendered with each car. And increasing average load per car automatically increases average load per train, and thereby increases the efficiency with which locomotives are used—which, when, as at present, the danger of a locomotive shortage is greater than the danger of a car shortage, is a matter the importance of which cannot be stressed too often or too strongly.

Whether, if more materials are not allocated for railway use, some shortage of transportation can be avoided seems doubtful. But "fore-warned is fore-armed." The means of preventing a serious shortage apparently are available; and, if all who can substantially help will do so, a serious shortage probably will be avoided.

A Question of Man-Hours

More and more widely is it becoming recognized that the fate of our country and its allies rests on our ability to produce war materials and supplies at a faster rate than the Axis powers, and to deliver them promptly to our far-flung fighting fronts. Industrialists, sensing this situation, have naturally been taking stock of their ability to increase production. Transportation systems, likewise, have been taking every possible step to do their full share in the emergency.

Industry and transportation, all things considered, have made a splendid record, but, unfortunately, it is not nearly great enough. The maximum use is not now being made of many well-equipped plants, because of the lack of man-power. True, intensive and productive methods have accomplished wonders in training great numbers of men and women for specialized jobs, but many plants are now running on only one or two shifts that could be operated almost continuously if workers were available. The problem of supplying trained supervisors is another bottleneck, although special efforts are being made to speed up training in that field also. Working rules in many instances are hampering production. Difficulties are being encountered in adapting many consumers goods plants to the production of war supplies. These shortcomings and numerous others must be frankly faced and overcome.

There is another weakness which should be and, let us hope, can be overcome, at least to a great extent. Accidents, whether in the plant, on the highways, in the home or on the farm, are causing a great loss of man-hours—much larger and much more serious than is generally recognized.

Last fall President Roosevelt called upon the National Safety Council to make a determined effort to prevent accidents by speeding up its numerous activities. So impressed were leaders in industry and transportation by the soundness of this suggestion that a campaign is now under way to raise five million dollars, to be expended over a period of two years in a comprehensive effort to reduce accidents in this country to a minimum and thus remove a serious handicap that is slowing down production.

The special campaign committee of the National Safety Council is headed up by W. A. Irvin of the United States Steel Corporation. Several hundred company heads, throughout the nation, have agreed to act on the sponsoring committee, and business and industry committees are being set up in their respective fields as rapidly as possible. So far as the railroads are concerned, F. E. Williamson, president of the New York Central, has agreed to act as chairman of the Eastern Railways Division, and William M. Jeffers, president of the Union Pacific, as chairman of the Western Railways Division. Juan Trippe, president of the Pan-American Airways, is chairman of the Aviation Transportation Division.

In spite of the fact that the campaign is only just getting well under way, substantial gifts have already been received, and the National Safety Council is starting to expand its activities where they will prove most effective in securing prompt results.

No Limitations on Majority Rule?

"When a majority of workers in a given plant vote in accordance with democratic procedures to be bound by some union maintenance plan it does not follow that those workers in the minority who refuse to be bound by the will of the majority have been denied some fundamental American right if they are excluded from employment in that plant."

The opinion from which the above paragraph is taken was written by Dean Wayne L. Morse [of the National War Labor Board]. . . .

The real danger is in this totalitarian doctrine of majority rule, and it carries more threat to American freedoms than do all the Hitler hosts. That doctrine is inherent in the Instrumentalist "philosophy" which has had a stranglehold in our higher institutions of learning during the last forty years.

It is inherent in our "Justice by Ear" theory of jurisprudence which has gained something like a stranglehold on our judicial system. It is the enemy that dogs the footsteps of all forms of democracy, and the only defense against it is in the spirit that gives life to those forms, the spirit that asserts that the state exists for the person and not the person for the state, and that not war itself may give that assertion the lie.

We are alive to the danger from without, but we are yet far from alive to the danger from within.

—From an article by Thomas F. Woodlock in the Wall Street Journal.

Our Job Which Lies Ahead*

An outline of some of the pressing equipment and other problems which now confront the railways

By F. G. Gurley

Vice-President, Atchison, Topeka & Santa Fe, Chicago

IT IS fortunate that the railroads and the public have had the benefit of the better equipment installed in service during the past 15 or 20 years and have had the benefit also of a decided increase in the over-all efficiency of the railroads. It is clear, however, that the railroads, many of which established new high records for the movement of ton miles during 1941 and are now handling even more as a result of the suddenly increased military production and the diversions from other forms of transportation, have a real obligation in these changing times. True, it's a privilege, but the obligation imposes a burden that concerns all of us.

We are told we have done a good job so far, but that we must do better. I think we can. I think these railroad managers, their staffs, the employees, and the supply people, who in a broad sense are a part of the railroad industry, have that great asset—that invaluable asset called the "know how." The "know how" is in your mind—you can't put it on a blueprint or produce it by manipulating a slide rule—it's the result of education, experience, and of continued thought, and devotion. I believe the people who have the "know how" appreciate the job ahead and see clearly the outline of what it requires. Basically it requires men and materials —it requires wise and economical use of men and materials, the kind of use that will be given by men who have the "know how."

Mere Change Not Necessarily an Improvement

We cannot be concerned too much by precedent. We must not hesitate to use new methods. But there should be sounded a note of warning. The mere fact that some plan contemplates a changed procedure does not necessarily mean that it is an improvement or that it will result in greater utilization of equipment and materials. Because we believe there is always room for improvement and because the performance to date has been so much better than some people expected there may be a belief that by the application of some bright ideas concerning this or that, the equipment and materials for railroad service may be drastically reduced below estimates of transportation officers.

Improvements come by continued attention to the task. No one can perform miracles and I hope there will be no failure to heed the counsel of those who possess the "know how." I think the judgment of those men is that we must strive harder than ever before for greater efficiency, utilization, and conservation, and that the benefits from that effort will minimize but not offset the need for more equipment and material if we are to transport the increasing volume of traffic currently estimated. During normal times the Shippers Regional Advisory Boards have been able to make remarkably accurate forecasts ninety days in advance as to prospective carloadings. It is more difficult to make precise forecasts during times like these when many plants and industries are shifting from civilian to military production. Despite that difficulty, however, forecasts must be made and on these must be predicated the plans for necessary equipment and materials.

Equipment Needs Forecast on the Basis of Peak Loading

For many years the heaviest carloadings have occurred in October and because of that it is customary to review the manner in which the October peak loadings were handled and as a result of that to make plans in anticipation of the future. During December the railways surveyed and revised their equipment program, and adopted a program to purchase 113,594 freight cars; 379 steam locomotives; 595 electric and Diesel engines, for installation from October 1, 1941, to October 1, 1942.

During October, November and December, 1941, the railways installed 24,975 new freight cars, and in January, 1942, installed 8,143 new freight cars. SPAB authorized the construction of 36,000 additional freight cars during the months of February, March and April, and only recently the WPB has authorized 18,000 additional cars. These add up to a total of slightly more than 87,000 new cars to be added to the national pool of cars that will be available to handle the peak traffic of 1942. This is 26,476 less than the number provided for in the plans of December. Within the past fortnight two important railroads cancelled arrangements for financing additional equipment because of the action of the War Production Board in denying materials needed for car construction.

On the basis of priorities already authorized it is not likely that all of the additional locomotives sought by the railroads will be obtained. While The Office of Defense Transportation has the obligation to provide adequate transportation it does not have control over supplies and materials which are indispensable in providing adequate transportation. It makes recommendations to the War Production Board which is supreme in the field of allocation and priorities.

The members of the War Production Board are carrying a heavy burden. Their responsibilities are great. Much of our present and future security and well being depends upon them. The sinking of many vessels by enemy action when there is a crying need for more boats than ever before presents a situation where steel plate and other critical materials are needed so badly for boats and other military equipment that one can understand why there is pressure to utilize the products of the steel mills for boats in preference to anything else. Regardless of that, however, land transportation is indispensable and one of our jobs as I conceive it is that, after having

* Abstract of a paper presented before the regular monthly meeting of the Western Railway Club, held at Chicago, April 20.

utilized existing equipment efficiently and determined by analysis the needs for additional equipment, we should emphasize the importance of this additional equipment to insure that there is no misunderstanding about the requirements to avoid any serious shortage of essential transportation. We would be derelict if we did otherwise.

Transportation No More Essential on Sea Than on Land

At a time when the united nations in all parts of the world look to us for military supplies it is essential that manufacturing concerns located in widely separated areas, which make parts for military equipment assembled finally in some one plant, be provided with the necessary instrumentalities of transportation so that their products will move in such a manner that these widely separated plants continue to function as an integrated and complete portion of the national arsenal of democracy. Transportation on the high seas is no more essential in my opinion than interior transportation. The successful prosecution of the war effort requires both. The sudden shift from coastwise boats to railroads in the case of coal and petroleum products into the New England states, where essential war materials are manufactured is an excellent illustration of the benefits due to an interior transportation system being able to take on an additional burden in an emergency—an emergency produced by enemy action uncomfortably close to our eastern shore line. It illustrates too one of the instances where a sudden and unexpected development produces a situation that cannot be forecasted when estimates are prepared as to prospective carloadings. While the seriousness of this particular situation has been relieved it may well be that either an increase or a continuation of this diverted traffic will require the construction of more cars and locomotives.

While there are difficulties about making accurate forecasts as to equipment requirements due to these unexpected war-time changes and during a time when industry is shifting more and more from civilian to military production one thing seems clear. With the lessening of civilian production and the increasing manufacture of military supplies a larger proportion of the nation's output will require preferred handling. In the very nature of things there will be less and less goods which can be set to one side by any system of transportation priorities. More and more of the total, being of a military nature, will necessitate the prompt movement incident to a well coordinated system of manufacture, transportation, and military use. There is a fundamental difference between manufacturing commodities and furnishing transportation. This difference should be understood and all of its ramifications thoroughly considered when thinking about alleviating the difficulties of a shortage by a priority system. In the first place, one of the outstanding differences between commodities and transportation is that in the case of commodities always there is a possibility of substitution. There is no substitute for transportation. Either you have it or you don't.

We are confronted with these perplexities not only with reference to new equipment but to the rebuilding of equipment. When parts of equipment are replaced with those of a different design or material, the purpose of which is to modernize the unit and to create an expectation of life fairly comparable with new and modern equipment, the rebuilt equipment is placed in the same category as new. With the discontinuance of rebuilding the perpetuation of the same number of units of rolling stock must be accomplished either by (a) acquisition of new cars; (b) keeping the old cars going by making repairs but without making improvement or increasing their capacity.

The general policy as I understand it is to perpetuate the existing railroad plant and to make available materials for repairs. Perhaps we should get some consolation from that but the facts are that under the present priority system materials essential to railroad repairs have an undesirably low standing on the priority list. It is so low that great anxiety is being felt about securing repair materials. In fact, one would be unduly optimistic if he did not feel gravely concerned about the entire situation as it now exists with reference to equipment and material. It seems to me important that there should be no misunderstanding about the entire circumstances. We must make our needs clear, and we must then use our persuasive efforts and our prayers in seeking the necessary authority from representatives of our Government who are charged with the grave responsibility of allocating basic materials for necessary purposes.

The percentage of bad order cars and locomotives has been very low for some time. This has been possible because men and materials were available. Much of the material had been placed in store stock before existing priority systems were in effect. When these stocks are exhausted we will not be able to replenish them as directly as we did formerly. The orders must be subjected to the security of the priority system. Even if everyone functions as rapidly as they can it is obvious we face a less favorable situation. This is said without any criticism either expressed or implied. Unquestionably a priority system is necessary now. But the fact remains that it does not argue for an improvement in securing repair materials, which are needed in order to continue this favorable and highly desirable ratio of equipment in serviceable condition.

There are innumerable phases in connection with the important problem of repair parts. Let us discuss one item which involves critical materials. During the past 10 or 15 years, when our engineers and manufacturers had available materials in generous quantities we began to use a large number of roller bearings on locomotives and passenger cars. One cannot help but be particularly apprehensive about replacing worn or damaged roller bearings. I say this because of the extremely serious situation that would result from the inability to replace roller bearings when the time comes that they need to be replaced. This is true because any attempt to change from roller bearings on the drivers of our new engines to the old style friction bearings would necessitate so many other changes that it is a practical impossibility if not a literal impossibility. This indicates how the iron horse can be put out of commission for want of what someone has characterized as the nails for the shoes for the iron horse.

All Railway Men Can Help Conserve Materials

I should now like to address a message to railroad mechanical officers and employees, to the railroad purchasing and stores organizations and to the railway supply people. Never was there a time when you had the burden of conserving valuable materials to the degree that that burden rests upon you today. I think perhaps that one of your principal duties is to see to it that each and every supervisor and each and every individual employee understands what the situation really is. I am convinced that there is much to be done with

reference to bringing home the seriousness of the problem to those directly associated with the many decisions that are made in the operation of this great railroad plant, which affect efficiency and economy in the use of materials. Every day, machinists, boilermakers, sheet metal workers, electricians, switchmen, train and engine men, section men, station employees and others by their manner of performing their daily tasks either contribute to saving of material or to wasting it. Fuel economy is tremendously important. Fuel oil for locomotives is becoming scarce. The supply, all too limited right now, may become entirely inadequate. We should check closely into the many practices which affect the use of fuel. For instance, engines should not be fired up too long in advance of the time actually needed in service. In addition to the problem of conservation there are many instances in which you do have the possibilities of substituting less critical material.

We expect the transportation officers and employees to accomplish more and more with less and less. They will have a hard time doing it but it must be done. There are nicely balanced questions which must be studied constantly with reference to the tonnage on each train and the time that should be allocated for its movement. After all, transportation reduced to its simplest terms is moving a given amount of weight in a given amount of time. Always the question is—What is the amount of time and amount of weight which will produce the best over-all results? That question is in sharper focus today than normally because in the past competition has influenced decisions but now the vital factors are production, utilization and efficiency. One specific question now under serious discussion is—would the lengthening of freight-train schedules bring about an improvement? Generally speaking the railroads are now producing their highest gross ton miles per train hour and while I doubt that railroad efficiency can be measured by any one yardstick, increasing gross ton miles per train hour is a good indication that locomotive and car utilization is being improved. I am one of those who believe that, generally speaking, we would not make an improvement in locomotive and car utilization and in our overall war effort by the lengthening of the western primary freight-train schedules. It might be that there are some particular instances where such procedure would produce beneficial results, but it is fundamental that good circulation is the essence of transportation; without it a transportation system, like a human body afflicted with poor circulation, becomes sluggish, falters, and fails.

Lengthened Schedules May Interfere with Production

An important consideration in the question about lengthening freight-train schedules is the effect upon those who are served by the railroads and the extent to which the lengthened schedule might interfere with their production and contribution to the war effort. In an integrated economy such as ours it is not always possible to know in advance the full reaction due to new and changed conditions. A typical example which comes to mind quickly is one of the results of the restrictions imposed by the shortage of rubber and the discontinuance of manufacturing automobiles. Normally fuel oil burned in locomotives may be said to be a by-product of refining gasoline. There is no question but that the rubber and automobile shortage is influencing gasoline production which in turn has a bearing upon the amount of fuel oil available for our steam locomotives.

Expeditious over-the-road movement does not within itself insure the circulation which is so essential. We must watch closely the many details of car movement and detention at terminals and stations. It is so easy for an empty car to be delayed an extra day because someone is not alert. All too often I have heard the explanation made—"Well, it only delayed the empty one day." A delay of one day is 24 hours too much. Here, as in the case of the conservation of material, we should remember the soundness of an old Scotch saying —"Many a mickle makes a muckle."

"Make-Work" Measures Not Needed or Permissible in War Time

During peace time organized labor was successful in having certain laws passed and in obtaining rules and interpretations of rules, all of which are claimed to be advantages for labor. Whether in the final analysis some of these accomplishments have been true advantages may be questioned but I think most everyone will agree that it is not unfair to characterize many of those as make-work measures, although the arguments used in their support may have stressed an improvement "in the public safety." It is not my purpose tonight to discuss the labor situation except to say that restrictions upon production imposed by rules or laws obtained during peace time are proper subjects to review and reconsider during war.

For example, is it wise, all things considered, and does it assist the successful prosecution of the war to restrict as we do in two states the length of freight trains to 70 cars and the length of passenger trains to 14 cars in one state when more cars can be moved in a train with the same high degree of safety which characterizes railroad operation throughout the country? I think the answer is "no." It is inescapable that compliance requires the needless use of locomotives at a time when there is a shortage of locomotives and a great demand elsewhere for the materials entering into the construction of locomotives. This is not a period of unemployment. It is a time when men who are truly essential in transportation service may seek exemption from military service. It is a time when there is a shortage of manpower and a time when apparently our Army is to increase to such a size that the shortage of men may become an acute question. It is not a time, therefore, when arguments in favor of make-work measures have much appeal.

I have addressed myself this evening more to questions pertaining to rolling stock than to rail and other materials required in the maintenance of way and structures. I have done that because most of the audience is more closely associated with questions relating to rolling stock. I have done it also by reason of the direct relation between rolling stock and railroad capacity. The fact remains, however, that no railroad is better than its track and good track is an indispensable part of a system which depends upon expedited movement and circulation for its success. Good track becomes poor track unless properly maintained. One of the jobs ahead for men holding authoritative positions is to see to it that rail and maintenance of way material is furnished so that there is not a deterioration in the fixed property because should that happen there will be an adverse effect upon the full utilization of the railroad plant and perhaps too upon safety of train operation.

There are many burdens and responsibilities in the job that lies ahead but there is also the privilege and the pleasure of continuing our work together, strengthened and sustained by the gratification that comes from doing our part in a time of emergency. I know that you as members of the great railroad industry will do your part.

Lackawanna Raises Tracks Above Streets in Syracuse, N. Y.

Grade separation project involves elevation of two miles of line and includes the construction of a new passenger station

TWENTY-THREE grade crossings between city streets and the tracks of the Delaware, Lackawanna & Western in the city of Syracuse, N. Y., have been eliminated as the result of a recently-completed grade-separation project involving the elevation of the railroad's tracks for a distance of approximately two miles through the heart of the city. Among other items of work, this project entailed the construction of bridges across 15 streets and a creek, and the building of a modern passenger station. While the undertaking is of interest for various reasons, the bridges attract particular attention because of the extreme lengths of some of the spans, requiring the use of girders of nickel and silicon steel at several locations, and various innovations in design and construction. Incidentally, only two of the street bridges are on tangent track and make right-angle crossings; all of the others are on curves, mostly with skew layouts.

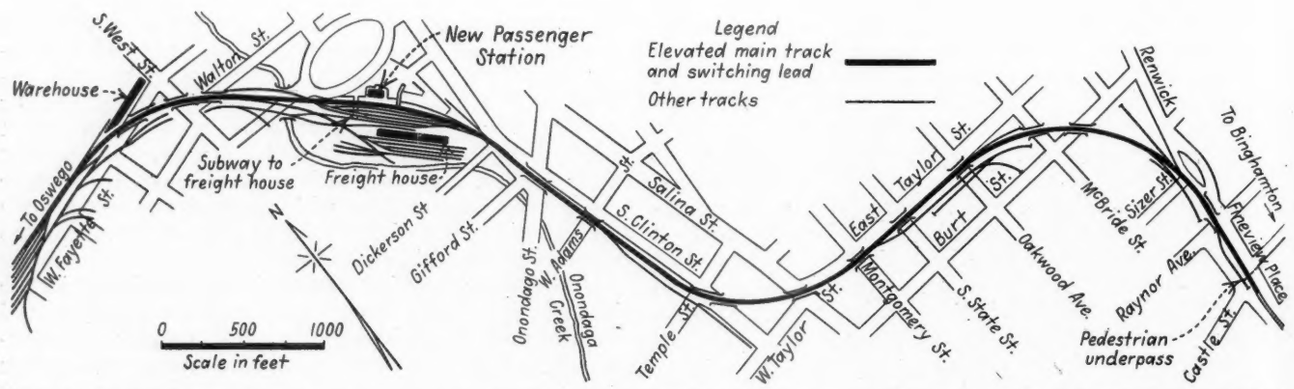
The line of the Lackawanna that extends through Syracuse is a portion of the single-track Syracuse division. In passing through the city, roughly from southeast to northwest, the line negotiates a number of relatively sharp curves, several of which approximate 6 deg. Various industries are served in the city, most of which are located on the west side * of the main track, and to permit these to be reached independently of the main line the railroad's trackage includes a continuous switching lead paralleling the main line on its west side. Hence, for practical purposes, the company has a double-track line through the city.

For some years there has been considerable agitation for the general separation of grades between the tracks of the railroad and the city streets of Syracuse. At the time the recent project was undertaken, only a few separations had been carried out, and these were in outlying sections. All crossings in the center of the city were still at grade, and, in addition, the tracks extended longitudinally along parts of two streets. As early as November, 1935, preliminary plans for a general separation of grades in the city were under preparation by the Syracuse Grade Crossing Commission, a state-appointed body. Subsequently, public hearings were held by the New York State Public Service Commission, which issued an order on January 20, 1939, directing that the elimination be carried out. The work was performed under the provisions of the constitutional amendment that was passed in New York State in 1938, which provides that a maximum of only 15 per cent of the cost of grade-separation projects shall be assessed against the railroads, the remainder being financed by the state.

Principal Features of Project

Briefly, the project involved the elimination of grade crossings and the removal of the tracks from two streets, by elevating the railroad line for a distance of approximately two miles through the most congested part of the city on an alinement that deviates only slightly from the original location. In this section only three streets that had previously crossed the tracks at grade were closed, the remainder being carried under the elevated tracks in street subways. The project also involved the separation of grades at two crossings outside the limits of the track elevation. One of these is at East Colvin street, somewhat to the south of the main project, where an individual street subway was installed by depressing the street grade. The other individual grade separation is located north of the elevated section and involves the crossing of a double-track lead to the railroad's engine terminal, which is located west of the main line, and West Fayette street, which parallels the main line. Here, the separation was achieved by a combination of street

* Throughout this article the directions given are based on the assumption that the line extends in a north-south direction, although, in reality, since it follows a winding course, these do not always correspond to the cardinal directions.



Plan of the Elevated Section of the Lackawanna's Line at Syracuse. Individual Grade Separation Projects at East Colvin Street and West Fayette Street Not Shown

depression and track elevation. Incidentally, a crossing of West Fayette street with the main line was among those eliminated in the track-elevation section of the project; hence, this street was involved at two locations.

Altogether, the project entailed the construction of bridges at 13 streets within the limits of the elevated section. Other bridge work included the building of an underpass to carry a driveway leading to the company's freighthouse, the construction of four separate bridges to carry five tracks across a stream known as Onondaga creek, the construction of a pedestrian subway at a street crossing, and the extension of an existing private underpass serving an industrial plant. In addition, as already mentioned, a new passenger station was built, being located on the site of the original structure, and minor alterations were made in the company's freighthouse and a warehouse. Facilities at the passenger station include separate subways for passengers and baggage.

Owing to grade changes occasioned in the tracks at the engine terminal by the construction of the grade-separation structure at West Fayette street involving the lead tracks, it was necessary to abandon the existing trestle-type coal pocket and wet ash pit at this point, these being replaced with a 100-ton capacity mechanical coal and sand plant and a crane-type cinder-handling plant serving two tracks.

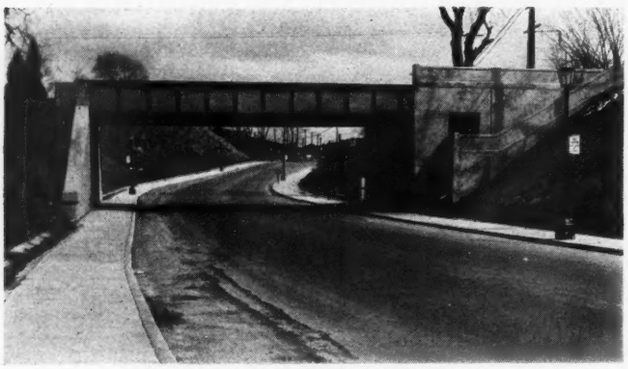
In that section of the line where the tracks were elevated, the raise in the grade amounted to a maximum of about 20 ft., the object being to obtain underclearances of 14 ft. at the bridges without more than minor altera-

The Onondaga Street Bridge, in Which the Girders, Largely of Nickel Steel, Are 130 Ft. Long and Weigh 128 Tons Each

This Bridge at Renwick Avenue Is the Only One on the Project Where a Center Support Was Used

A View of South Salina Street Bridge Illustrative of Attractive Effect Produced by Massive Pilasters in the Abutments

tions in the street grades. For the most part, the elevated line is carried on an earth embankment, except that viaduct approach structures are provided at two of the street bridges. Because of limited side clearances, the embankment is confined behind retaining walls at some locations, notably where the tracks are flanked on the



The Bridge at East Colvin Street. Note Sidewalk High Up in Abutment

east side by South Clinton street, and in the vicinity of the passenger and freight stations, which are located at the street level on opposite sides of the elevated tracks. The retaining walls are mostly of reinforced concrete, although at a number of locations, including several places where unfavorable sub-soil conditions were encountered, the walls are of precast concrete cribbing.

All Industry Connections Maintained

Connections with industries previously served by the road, as well as the company's freighthouse, are all maintained by means of ramp tracks which, in several instances, have grades as steep as 3.5 per cent. In fact, at two locations it was necessary to resort to the use of switchbacks in laying out the industry tracks. Incidentally, all but two of the industries served are located on the west side of the tracks, a fact that simplified the problem of maintaining industry connections during the construction period.

All street bridges that were built in connection with this project are of the same general type, consisting of through plate girder spans on concrete abutments, but in adapting the structures to the varying conditions encountered at the different sites it was necessary to introduce many variations in detail. On the main portion of the project, that is, where the tracks were elevated, the main-line bridges are all of double-track construction and have ballasted decks consisting of floor beams covered with reinforced concrete slabs. All the main-track bridges in the elevated section have only two girders each, while at the individual grade separation at East Colvin street the bridge is a three-girder structure. The bridge at Renwick avenue in the elevated section also represents a departure from usual practice on this project in that it has two girder spans with a center support in the roadway, whereas all other bridges have single girder spans across the roadways.

Some Long Spans

As mentioned at the beginning of this article, all but two of the street bridges are on curves and are skewed. For this reason, and particularly because some of the skew angles are relatively sharp, a number of the bridges have extremely long spans. Among the longer bridges are those at Onondaga street, with a length between end bearings of 128 ft.; at West Fayette street (in the elevated section) with a length of 124 ft. 8 in.; at Walton street, with a length of 113 ft.; and at South Salina street, with a length of 112 ft. In fact, in order to keep the size of the girders for these bridges within reasonable limits, it was necessary to employ nickel steel for the webs, flanges and end stiffeners of the girders in the Onondaga and West Fayette Street bridges, and silicon steel for the corresponding parts of the Walton Street and South Salina Street structures. Even with the use of nickel steel, the girders in the Onondaga Street bridge have a height of 11 ft. 6½ in. between the backs of the flange angles, and weigh 128 tons each.

The bridges at three other locations on the elevated section are also worthy of mention. These are the structures that carry the tracks across Montgomery street, South State street and Oakwood avenue. The streets named are all located adjacent to each other in a section where the tracks are flanked on the east side by East Taylor street, which is located in such close proximity to the tracks that the embankment is held by a retaining wall for its full height. Here, the problem was to provide means whereby motorists in either East Taylor street or those coming under the bridges in either of the three intersecting streets would be permitted an adequate view of opposing traffic.

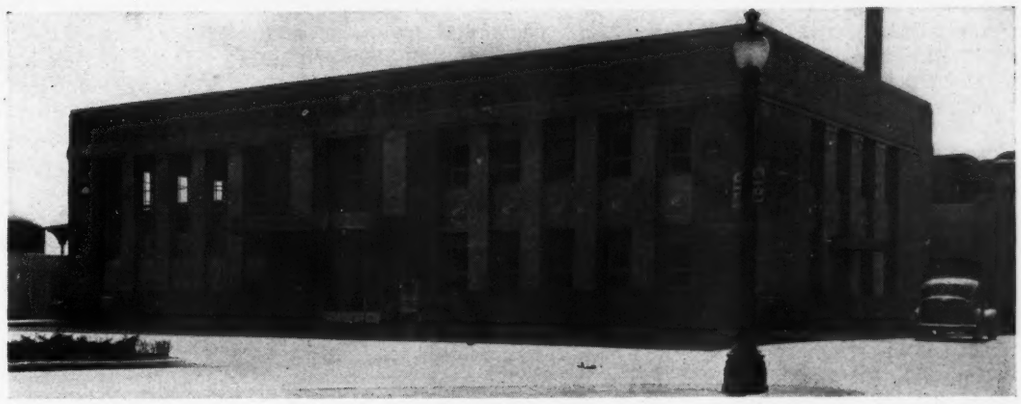
Supplementary Spans for Visibility

This was accomplished by introducing a supplementary span at each end of each of the three bridges, thereby

The End Spans Were Introduced in This Bridge at Oakwood Avenue, as Well as in Two Other Bridges, to Give a Better Angle of Vision for Motorists

providing openings through the embankment that give the desired angle of vision. These openings do not carry either vehicular or pedestrian traffic. The supplementary spans are each 23 ft. 6 in. long and are of reinforced-concrete slab construction. The adjoining ends of the main and supplementary spans at each of these locations are supported on structural steel bents in which the columns and caps are encased in concrete, while the outer ends of the supplementary spans are carried on reinforced concrete abutments.

Because of special conditions prevailing at Onondaga and Walton streets, the bridges spanning these thoroughfares are flanked by approach spans. At Onondaga street there are three such spans at one end of the street bridge and seven at the other. Averaging about 43 ft. in length, these spans are of steel-beam construction with concrete slab decks, and have facia beams encased in concrete on



This New Station Was Built in Connection With the Grade Separation Project

both sides, which are surmounted by concrete balustrades. The approach spans are supported on concrete piers.

At Walton street there are five approach spans on the south side of the street bridge. At this location the trackage on the approach spans includes a ramp track in addition to the main line and the switching lead. The construction here is generally similar to the approaches at Onondaga street, except that the spans for the main track are of deck-girder instead of steel-beam construction. At the north, or opposite, end of the Walton Street bridge, in a triangular area separating this structure from the adjacent end of a bridge across South West street, the tracks are carried on a reinforced concrete slab.

Ballastless-Deck Bridges

At two locations on this project it was necessary to resort to the use of ballastless-deck bridges because of the necessity of restricting the depths of the decks to a minimum. One of these is at the individual grade separation involving the double-track lead to the engine terminal and West Fayette street, while the other involves a structure that carries a ramp track across South State street in the main portion of the project. At the West Fayette Street bridge, the amount which the tracks could be raised was restricted by the necessity of avoiding excessive grades in the engine terminal lead tracks, while the extent to which the grade of the street could be lowered was governed by the fact that West Fayette street intersects Magnolia street immediately adjacent to the bridge, and the lowering of the street to any great extent would have necessitated an expensive adjustment in the grade of Magnolia street.

At this location each track is carried by a separate through girder span on box-type abutments. In addition to being on a sharp skew, the two tracks at this crossing are both on curves approximating 12 deg. and on grades of 3 per cent, descending toward the engine terminal. In both spans the deck systems consist of floor beams covered by ½-in. copper-bearing steel plates. Adjacent sections of the plate decks are butt-welded to each other and, in addition, are riveted to the floor beams. An interesting detail of the construction is that each rail is laid in a 15-in. channel and is fastened by bolted clips. To protect the rails and fastenings from corrosion, each channel is filled with a bituminous material. The deck construction for the bridge carrying the ramp track across South State street is essentially similar to that for the two structures at West Fayette street.

At East Colvin Street

The individual grade separation at East Colvin street was achieved by lowering the street grade on a slightly different alinement. The railroad bridge at this location consists of a double-track single through-girder span (three girders) extending over the roadway and two sidewalks. In bringing about this grade separation, which is located in a residential neighborhood, it was necessary to make provision for pedestrians using the original street to pass from one side of the tracks to the other without crossing them at grade. Since the level of the street on the new alinement is considerably below that of the original street, stairways extending down to the low-level sidewalks would have been of considerable height. To overcome this objection, one of the abutments was made of the box type and the opening, carrying a sidewalk for pedestrians using the higher level, was established as close to the top of the abutment as conditions permitted.

In addition to the various street bridges that were built as part of this project, a subway was constructed under the tracks in the vicinity of the passenger station to give access to the freighthouse from the east side of the tracks. This structure, which extends under seven tracks, is of rigid-frame concrete construction with semi-

This View Shows Three of the Four Bridges That It Was Necessary to Build Across Onondaga Creek

gravity abutments, and provides a clear roadway width of 28 ft. 7½ in.

Concrete Details

Certain aspects of the concrete construction on this project are worthy of mention. For example, in most of the street bridges pilasters of massive construction with fluted surfaces were provided at the ends of piers and abutments. The attractive appearance presented by these elements in the design was enhanced by the judicious use of concrete facia walls at various points, such as in the approach and supplementary bridge spans. It is interesting to note that the pilasters at the ends of the bridge seats were poured monolithic with the abutments, rather than being placed separately after the steel work had been installed. This policy had the advantage of precluding the introduction of construction joints in the pilasters near the bridge seats.

The retaining walls that were built in connection with the project are largely of conventional design, but the manner in which their exposed faces were treated at certain locations to obtain a pleasing effect is somewhat unusual. At intervals in the faces of these walls vertical "V" grooves were provided in such a manner as to simulate pilasters. Surmounting the retaining walls are concrete balustrades containing true pilasters that continue the lines of the simulated pilasters in the faces of the walls, thereby enhancing the effect. The decorative scheme also includes rectangular panels, formed by "V" grooves, in the surface areas of the walls between the pilasters.

Bridges at Onondaga Creek

Among the new bridges that were built in this project are four separate spans carrying five tracks that were constructed across Onondaga creek. Of the five tracks extending across this creek, only two, the main track and the switching lead, are at the same level and grade, and these two are carried across the creek on a double-track span. The other three tracks, being on different ramp grades, each required a separate span. All the bridges at the creek crossing are single-span deck plate-girder structures with reinforced concrete decks. The decks are trough-like in cross-section, and each bridge incorporates a concrete sidewalk for the use of trainmen along each side. Hand rails of wrought iron are provided on all these bridges.

All of the Onondaga Creek bridges are carried on concrete abutments supported on H-section steel piles. A feature of these abutments is their unusual height which measures as much as 38 ft. between the bottoms of the footings and the tops of the backwalls. The abutments at all other bridges, as well as the retaining walls, are supported on creosoted timber piles, except at certain locations where the subsoil conditions required the use of concrete piers. Broadly speaking, the subsoil encountered on this project consists of generally unstable material overlying shale or hard gravel which was found at various depths. In fact, the overburden ecountered at the individual grade-separation job at West Fayette street proved to be so soft that the entire construction area had to be enclosed with wood sheeting in order that the work could proceed. Incidentally, at a number of locations where the penetration of the timber bearing piles was relatively small, an unusually large proportion of the upper parts of the piles was enclosed in concrete in order to increase their lateral stability.

The new passenger facilities that were provided as part of this project are of the two-level type. The station is located at the ground level on the east side of the tracks, with a subway of concrete construction extending under the embankment to stairways leading up to a covered island platform consisting of a concrete slab supported on piles driven through the fill. The platform canopy, of the butterfly type, is of structural steel construction with a cast-in-place concrete slab roof. Baggage is handled between the station and the passenger platform in a separate subway and an elevator is provided for raising it to the upper level. Trackage at the station includes a number of storage tracks and a spur track for handling mail and express. Because of the proximity of the passenger station on the east side of the tracks and of the existing freighthouse on the other, the embankment is enclosed between concrete retaining walls throughout the station area.

The new station, which contains various division offices in addition to the passenger facilities, is an attractive modern structure. Rectangular in plan, it is 48 ft. 8 in. by 96 ft. in external dimensions, and is two stories in height, except for a small section at the rear. The main entrance is located in the center of the facade, while secondary entrances are provided in both end walls. From the main entrance a passageway extends through the building to an enclosed connecting passage between the station and the entrance to the passenger subway under the embankment. The connecting passage is necessary because the rear side of the station is separated from the face of the embankment retaining wall by a 16-ft. space.

To the left of the main entrance in the station is the waiting room, 30 ft. by 37 ft. in plan, which extends the full height of the building. In the rear wall of this room is an alcove containing a newsstand, and to the left of this is the entrance to the ladies' rest room. The men's room is also located to the rear of the waiting room, being reached from the passageway.

To the right of the main entrance are the office of the city passenger agent, the ticket office and, at the rear, a short corridor containing telephone booths and lockers, which leads to the baggage room. Other facilities to the right of the main entrance on the first floor include, in addition to various closet and storage space, a conference room and an office for railroad police. On the second floor there are offices for the division freight agent, the claim agent, the roadmaster and various auxiliary space, including a fan and heater room. An entrance at the office end of the building gives access to the first-floor offices and baggage room and to a stairway leading to the second floor. There is also a stairway leading to a small basement.

Exterior Features

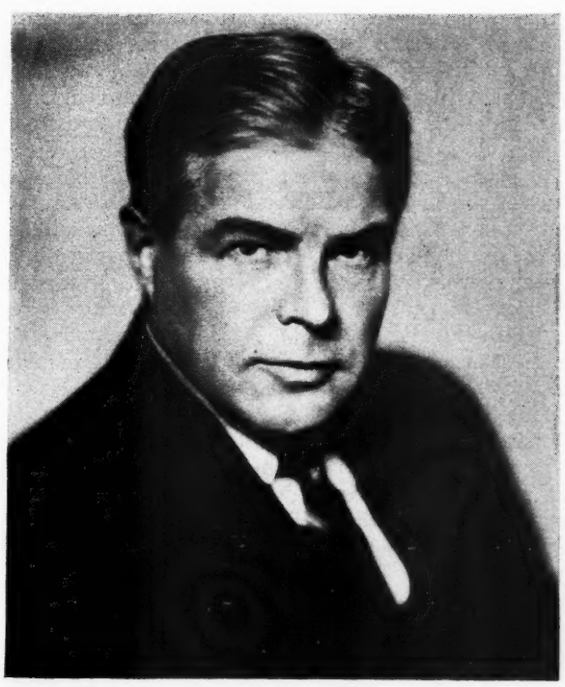
Of concrete, brick and steel construction, the station is finished on the exterior with buff-colored face brick, is trimmed with Indiana limestone and has a base course of brown New Hampshire granite. Effective use is made on the exterior of fluted limestone pilasters between the windows and on each side of the main entrance, and of window spandrels of the same material, each of which carries a circular design done in aluminum. Directly above the main entrance the word "Lackawanna" is spelled out in large letters of stainless steel. All the entrance doors are of plate glass with aluminum sash and frames, and above each entrance doorway there is a marquee of modernistic design with aluminum finish. The window sash and frames are also of aluminum.

(*Continued on page 902*)

Sir Edward Beatty Resigns C.P.R. Presidency

D. C. Coleman, vice-president, succeeds to Canadian Pacific's executive post; Sir Edward will remain chairman

D. C. Coleman



Sir Edward W. Beatty

SIR EDWARD W. BEATTY, chairman and president of the Canadian Pacific, resigned May 1 because of ill health. At the request of the board of directors, he will continue to act as chairman and thus be available for counsel. D'Alton C. Coleman, who has been associated with the railroad since 1899 and a director and vice-president since 1934, succeeds to the presidency.

Sir Edward was stricken with illness in March, 1941. Although there had been a marked improvement in recent months, he was advised by his doctors that early and complete recovery could be attained only by divesting himself of some of his burdens.

Sir Edward assumed the presidency of the C. P. R. in 1918, having been elected a week before his forty-first birthday. He was at once called upon to face problems of post-war adjustment, one of which brought in its wake the consolidation of all other important Canadian railways into one government-owned system, and which thereby introduced serious complications into his task of maintaining the C. P. R. on a satisfactory competitive basis. During his tenure in office, by directing expenditures totaling many millions of dollars, he expanded the C. P. R.'s rail, shipping, telegraph, hotel and other services into one of the world's greatest privately-owned transportation systems.

Sir Edward was born in Thorold, Ont., October 16, 1877, and was educated at the University of Toronto and the Osgoode Hall Law School. He was called to the Ontario Bar in 1901 and joined the Canadian Pacific in that same year as an assistant in the law department. He was appointed assistant solicitor in 1905; general solicitor in 1910; general counsel in 1913; vice-president and general counsel in 1914; a director and member of the executive committee in 1916; and finally succeeded Lord Shaughnessy as president in 1918. He became chairman of the board as well upon the latter's death in 1924.

Sir Edward devoted his exceptional talents and energies in many directions. He was chairman of the Consolidated Mining & Smelting Co. of Canada; president of Canadian Airways, Ltd.; and was associated as an officer or director of many other business organizations, including the Bank of Montreal, the Hotel Waldorf Astoria Corporation (New York) and the Sun Life Assurance Company. In the fields of education and public welfare, he was chancellor of McGill University; president of the Boy Scouts Association of Canada; president of the Royal Victoria Hospital, Montreal; honorary president of the St. John Ambulance Association, the Canadian National Institute for the Blind and the Montreal Boys Association; chairman of the National Advisory Board of the Salvation Army; and active in many other social enterprises.

In accepting his resignation, the company's directors placed on record their appreciation of his outstanding work, declaring that "he enhanced and enlarged the

position of the company in the confidence and regard of the people it serves throughout the world."

D'Alton Corry Coleman becomes the Canadian Pacific's fifth president and brings to that post a wealth of practical knowledge of the railroad industry. He was born at Carleton Place, Ont., in 1879, and was educated at Arnprior Collegiate Institute. He entered railway service as a clerk in the engineering department of the C. P. R. at Fort William, Ont., in 1899. During his subsequent career, he was superintendent at Nelson, B. C., in 1907; superintendent at Vancouver, B. C., in 1908; superintendent, car service, at Winnipeg, Man., in 1908; general superintendent, Manitoba district, in 1912; general superintendent, Alberta district, in 1913; assistant general manager, western lines, in 1915; vice-president, western lines, in 1918. He was elected vice-president of the Canadian Pacific system on September 10, 1934.

Mr. Coleman also is president of the Quebec Central and the Dominion Atlantic, and is an officer or director of many other enterprises including the Eastern Abattoirs, Ltd., the Pennsylvania-Ontario Transportation Company, the Metropolitan Life Insurance Company of New York, the Canadian Marconi Company, the Toronto Terminals Railway and the Vancouver Hotel Company. He is chairman of the executive committee, University of Bishop's College, and served as chairman of the board of governors of the University of Manitoba from 1932 to 1934.

Lackawanna Raises Tracks Above Streets in Syracuse, N. Y.

(*Continued from page 900*)

The interiors of the public rooms in the station are colorful and attractive. In the waiting room and the passageway, the walls are finished in travertine of varying shades of pink and buff, while the floors are of terrazo, with aluminum dividing strips, in different shades of brown. The base course is of brown marble. The ceiling in the waiting room and passageway is of acoustical plaster, and these areas are lighted by ceiling fixtures of the flush type. All interior doors and trim in the public rooms are of aluminum, including the grille work, counter panels and foot rail at the ticket window. Of especial interest is the fact that all seats in the waiting room consist of individual maple chairs upholstered in either blue or terra cotta leather. In the toilet rooms the walls, as well as the toilet partitions, are of brown marble, and the floors are of green terrazo. Glass block windows are provided in both toilet rooms.

The station is heated by a hot-air duct system through recessed outlets, except that unit heaters are provided in the baggage room. Steam for the heating system is furnished by a coal-fired stoker-fed boiler plant located in a boiler room underneath the tracks, where coal is delivered to the storage bin directly from cars on one of the overhead tracks. Steam from the boiler plant is delivered to the fan room on the second floor of the station, from which heated filtered air is distributed to the waiting room. The offices and various other rooms are heated by recessed convectors placed under the windows. A mechanical method of ventilation is employed in the toilet rooms.

Construction Procedure

The procedure that was followed in carrying out the track-elevation work on this project was to build a single-track temporary line along the west side of the original alinement so that the construction work could be conducted in the clear. Incidentally, because of the congested nature of the district traversed, it was necessary to remove many buildings in order to obtain the required width of property. The old passenger station was demolished early in the work and a temporary station was constructed at another location for handling passenger business during the construction period. The problem of heating the temporary station was solved by using the boiler plant that was later installed for heating the permanent station. Other temporary construction included a timber trestle that was constructed across Onondaga creek to carry the temporary line.

All the concrete that was placed on this job was proportioned at a central batching plant, although transit mixing was allowed only when the concrete was to be placed in close proximity to the batching plant. In the bridge erection work the girders were usually brought in on flat cars over the temporary track and lifted into position on the abutments by crawler cranes, although, in at least one instance, the girders had to be hauled by truck and trailer for some distance through the city streets to reach the bridge site.

This was an undertaking of considerable proportions, as is indicated by the fact that two of the girders handled in this manner were 85 ft. long.

The grading was not particularly heavy, amounting to about 175,000 cu. yd. of excavation and 50,000 cu. yd. of borrow, and all haulage was by motor truck.

Track Work

All track work required on this project was performed by railroad forces. An interesting sidelight is afforded by the fact that all ballast, ties, rail and fastenings required for the tracks on the elevated section of the line were delivered on the job in trucks, hired locally, using the ramps that had been employed by the grading contractor. The rails, fastenings and ties were transferred from railroad cars to the trucks at a local yard, but the ballast was hauled directly from the source, six miles distant, to the point of installation. By using trucks for this work, it was possible to construct the tracks as soon as the embankments were completed and without waiting until the bridges had been installed. In fact, it is estimated that the track work was completed about two months earlier than would have been possible if conventional methods had been used.

The plans for this project were drawn and the field work was supervised by railroad forces under the general direction of George A. Phillips, chief engineer. John L. Vogel, engineer of structures, had direct supervision over the design work, while the work in the field was under the supervision of A. F. Reiland, assistant engineer, assisted by H. W. Machemer, also assistant engineer. The Syracuse Grade Crossing Commission, of which Nelson F. Pitts is chief engineer and Charles Slack is assistant engineer, exercised general supervision over the entire project. The general contract was held by the Elmhurst Contracting Company, Corona, Long Island, N. Y., except that the bridge steel was furnished and erected by the American Bridge Company, the passenger station was built by the Irish Construction Company, Syracuse, and the coal, ash and sand plants were furnished and erected by the Ross & White Co., Chicago. Fred B. O'Connor, Syracuse, was the architect for the passenger station. Work on the general contract was started on June 11, 1940, and was completed on January 16, 1942.

Transportation Troubles Discussed

Director Eastman and competent panel consider means of meeting impending emergency

THERE are only three remedies for impending railroad troubles, according to a statement made by Joseph B. Eastman, director of the Office of Defense Transportation, at a transportation luncheon held in connection with the annual meeting of the Chamber of Commerce of the United States, at Chicago on April 29. One is more cars and locomotives; another is to make better use of those which now exist; the third is to reduce the work to be done, by curtailing traffic.

Problems and prospects were outlined by Mr. Eastman and the subject was further considered by a panel consisting of T. C. Burwell, vice-president of the A. E. Staley Manufacturing Company, Decatur, Ill.; Powell C. Groner, president of the Kansas City Public Service Company, Kansas City, Mo.; H. D. Horton, president of the Horton Motor Lines, Charlotte, N. C.; Robert Henry, director of Public Relations of the Association of American Railroads, Washington, D. C.; Frank M. Kreml, director of the Safety division of the International Association of Chiefs of Police, Evanston, Ill.; Edward V. Rickenbacker, president of Eastern Airlines, Inc., New York; A. W. Vogtle, president of the National Association of Shippers Advisory Boards, Birmingham, Ala.; and Arthur M. Hill, president of the Atlantic Greyhound Corporation, Charleston, W. Va., who presided.

Following Mr. Eastman's introduction, the members of the panel answered questions pertaining to shippers, railroads, water transportation, trucks, buses, local passenger transport automobiles and air transport. A summary of the answers made by members of the panel, follows:

Ton-Miles Increasing Faster Than Car Loadings

Mr. Eastman, in discussing the topic said that traffic is now moving longer distances, with the result that railroad ton-miles are increasing faster than car loadings, and the movement of troops and passenger traffic in general has put a heavy strain on railroad equipment, but ahead looms a prospect which is even more profoundly disturbing.

In discussing the three remedies for the impending situation, he said that "the number of new cars and locomotives that can be built depends upon the verdict of the War Production Board. I am pleading the cause of transportation before that Board to the full extent of my ability, but you may be sure that there will, in any event, be no abundance of cars and locomotives and that it will be necessary to go the limit in making the best possible use of those that we have, and ultimately, also, to curtail traffic to the extent that it can be done without impairing the war effort or the strength and morale of the citizenry."

"The business men of the country can do a lot to help the carriers make the best possible use of their equipment by circulating cars faster, loading cars more heavily and ironing out peak movements, which occur through the year, particularly in October."

Mr. Eastman stated that domestic transportation is as essential to the war effort as is overseas transportation, and that if domestic transportation facilities are not maintained in a condition which will enable them to perform such service efficiently, the war effort will suffer.

Machinery For Controlling Traffic Set Up

Machinery has been set up providing for control of the movement of all traffic to the ports in a manner designed to prevent accumulations or congestions, he said. Shipments for government agencies will be made through a joint agency representing the War Department, other government procurement departments, the British Ministry of War Transport, the Office of Defense Transportation, and the War Shipping Administration. Commercial shipments will be controlled through the export licenses of the Board of Economic Wafare, and unit permits for transportation of the cars to the port will be issued only after space therefor has been firmly booked by the ships. So far as railroad accumulations or congestion other than that at the ports are concerned, he said, the Office of Defense Transportation receives daily reports from all railroads, enabling it to be currently informed of traffic conditions on all routes and lines and at all important terminals. When and wherever these reports disclose dangerous conditions, the Office of Defense Transportation is prepared to take steps to divert traffic until the conditions have been relieved.

In discussing the feasibility of moving oil up the Mississippi and Ohio rivers to Pittsburgh or other points to relieve the eastern oil situation, Mr. Eastman said that "approximately 50,000 barrels a day of oil is moved by barge up the Mississippi and Ohio rivers to Pittsburgh and other points and is being moved thence by rail to the eastern seaboard. All equipment which is now available for such movements is, we believe, being so used. However, there are barges which are in use for the movement of oil on the upper Mississippi river, on the Warrior river, and along the Gulf Coast which might in some instances be diverted to service to the Ohio river points. Study is also being given to the practicability of converting steel barges now used for other purposes so that they will be available for the movement of oil. It appears that many of these barges are now being used for essential purposes, but it is possible that in some instances wooden barges, which could be constructed quickly, might be substituted. Wooden barges, however, do not appear to be feasible in the major river operations where the barges are pushed in compact aggregates up the river by the propelling boats.

"Iron ore could be moved from Minnesota by the river system to Pittsburgh and other river points, if barges could be made available, but it would require a movement by rail from the head-of-the-lakes to Minneapolis and the construction of adequate transfer facilities. Compared with the present movement by lake and rail, this barge movement would be most uneconomic. It could be justified only if it were necessary to supplement the movement by lake and rail, and we do not believe that will be necessary this year. Looking further

into the future, we believe that other alternative routes could be made available, with certain expenditures, which would be superior to the river movement.

Spreading of Peaks Would Save Power and Equipment

Mr. Henry, in discussing carload peaks, said that "if traffic loads could be spread evenly throughout the 52 weeks of the year, traffic could be handled with about 12 per cent less power and equipment than it takes to move the same volume under the present conditions of variation. "Of course," he continued, "traffic can never be made to flow that evenly. Lake Superior iron ore, for example, can be moved only when temperatures are above freezing. Crops, especially those of a perishable nature, must be moved when they ripen and are harvested. However, coal can be moved and stored during times of light demand. Almost any product which is not perishable in its nature, and which can be produced or manufactured regardless of season or weather, offers an opportunity for leveling out the transportation demands."

"The status of railroads in the post-war world," Mr. Henry continued, "will depend upon two things—the state of the railroads themselves and the general shape of things in the world in which they must live and do business. The railroads have one fundamental strength which will carry on into the future, the tremendous inherent efficiency of the train on tracks as a way of transportation wherever there is any considerable volume of transportation to be done. Further efficiencies in the use of that basic idea, developed in recent years, including the war years, will help meet the future.

"The second factor, the general conditions under which they will operate, is largely beyond the control of the railroads themselves. They can only recommend and urge the establishment of such conditions as will enable each form of transportation to do the work which it can do best at the lowest true cost.

"In some of the discussion of what railroads should do in preparation for the future, there has seemed to me to be more emphasis on the idea of retirement of debt than is justified by the possibilities along that line. For one thing, there is not going to be any great surplus of net income with which to pay off debts in significant amounts. For another thing, retirement of debt is not of nearly so much consequence in the future position of the railroads as it is sometimes assumed to be. It may well be that railroad earnings, whatever they may amount to, could better be used, as materials may become available, to strengthen and improve railroad plant so as to add to the efficiency and economy of operation, rather than to use it all to pay off debts."

Cars Should Be Loaded to Capacity

In discussing the utilization of cars Mr. Vogtle said that "the railroads are not going to get all the new cars and new locomotives they had expected; and, plainly, why should new equipment be provided when there is any latitude at all for more efficient utilization of existing equipment? At present, 42 per cent of the capacity in refrigerator cars and 26 per cent of the capacity in box cars is being used. On one of the large railroads in the southeast for January, a heavy loading month, only 56 per cent of car capacity was loaded. We simply cannot load a car to half capacity and ask for diversion of critical materials from the war effort to build a new car likewise to be loaded to half capacity, when the existing car would accommodate both loadings.

"One of the immediate assignments of chambers of commerce and regional advisory boards is a campaign for heavy loading and greater efficiency in the use of cars in merchandise or less-than-carload traffic, which requires the co-operation and careful planning of jobbers and wholesalers, on the one hand, and of the receiving merchants on the other. The inauguration of sailing days from larger centers, such as Chicago and St. Louis, and the staggering of heavier loaded package cars to the smaller stations on the basis of two to three services per week, instead of a car every day, will save many more cars."

Existing Methods of Passenger Transportation Will Be Inadequate

Mr. Hill, in discussing bus transportation in the war effort, said that the greatest problem with the bus companies is the retention of trained and expert bus drivers to operate the heavily patronized vehicles under present conditions. He also said that it is obvious that, with the speeding up the transportation tempo due to war conditions, added to the shortage of rubber and materials to build new automobiles, all existing methods of transportation will be inadequate to carry the necessary movement of soldiers, workers and others during the war period.

According to Mr. Horton, any attempt to place arbitrary limits on the length of truck hauls would be unwise, as rush movements of materials and supplies for coast-to-coast have been among the trucking industry's most valuable contributions to the war effort. Half-baked theories regarding the relative economy and fitness of the various types of transportation, if put into effect, he said, would seriously cripple the war program. Railroads have an edge over trucks in the long-haul bulk-commodity field, but it would be difficult to fix an arbitrary maximum on length of truck hauls and a minimum length on rail hauls without impairing the efficiency of both agencies.

Mr. Kreml said that "ninety million citizens depend substantially upon the motor vehicle and that more than half of our passenger car mileage is for necessary driving. As a result, we have in the United States today the greatest traffic problem in history. The stopping of manufacturing of automobiles will not solve the accident problem. In Britain's second war year, 10,073 persons were killed in traffic accidents, an increase of 51.9 per cent over the corresponding pre-war period. The English tell us that accidents are fewer but more deadly than before the war. This may be attributed partly to an increase of recklessness on the roads because of the general tendency to disregard the ordinary risks of everyday life. Our situation may be quite similar to that of the English."

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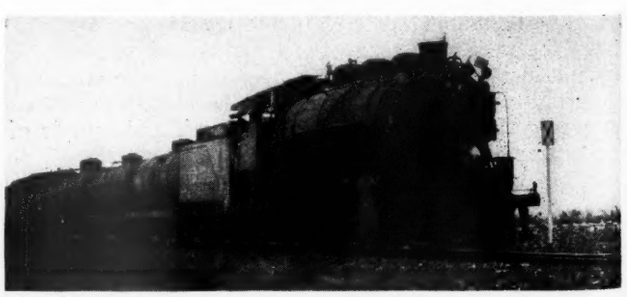

Photo by Robert Hage

A Freight Train on the National Railways of Mexico Near Monterrey, an Important Junction Point on the Line Between Laredo and Tampico

Freight Claim Division Celebrates Semi-Centennial

Settlement and prevention work adjusted to facilitate transportation of war materials

THE completion of 50 years as a national body was celebrated by the Freight Claim Division of the Association of American Railroads at its annual meeting at Chicago on April 28 and 29. Recognition of the golden anniversary, which occurred on March 4, 1942, was made at an evening session on April 28. Participating was a special committee of all living past chairmen of the Freight Claim Division and past presidents of its predecessor organization, the Freight Claim Association, several of whom read papers covering the activities of the organization for selected periods.

Problems facing freight claim and loss and damage prevention officers as a result of the war, were discussed during the convention. In order to facilitate the transportation of war materials, several rules for the settlement of freight claims were adopted by the members. In addition, Carl R. Gray, Jr. described the organization and personnel of the Railway Battalions, as outlined elsewhere in this issue.

Officers elected for the ensuing year were as follows: Chairman, C. D. Hart, assistant general claim agent, Atchison, Topeka & Santa Fe, Topeka, Kan.; first vice-chairman, J. J. McManus, freight claim agent, Northern Pacific, St. Paul, Minn.; second vice-chairman, J. M. Heath, freight claim agent, Lehigh Valley, Philadelphia, Pa.

Richard H. Aishton Speaks at Semi-Centennial Dinner

Richard H. Aishton, who retired as chairman of the board of the Association of American Railroads in 1934, and who will be 82 years old on June 2, was the featured speaker at the semi-centennial dinner because of the important part he played in the development of the Freight Claim Division. It was through the efforts of Mr. Aishton that the Freight Claim Association became the Freight Claim Division of the American Railway Association on July 31, 1919. In closing his remarks, Mr. Aishton said, "You men today have a greater incentive than you have ever had in your history and through your prevention methods, your supervision and your claim settlements, you can conserve the materials and money that are so vital to the winning of this war."

Henry C. Pribble, general claim agent of the Atchison, Topeka & Santa Fe, and chairman of the celebration committee, acted as toastmaster. He declared that the machinery set up by this organization half a century ago, has resulted in the elimination of litigation between railroads of freight loss and damage claims. "If the affairs of men, nationally and internationally, could be made subject to laws as fair as the freight claim intercarrier laws we have," Mr. Pribble said, "men would not be murdering each other all over the face of the earth as they are today."

The birth of the Freight Claim Division of the Association of American Railroads, according to Louis Pilcher, secretary of the Freight Claim Division, was March 3, 1892, when, at a meeting in Chicago, action was taken to amalgamate into one organization three territorial bodies previously designated as the Freight Claim Agents' Association of the West, the Railway Freight Claim Association of the Eastern, Western and Southern States, and a group termed Freight Claim Officers of Lines interested in Texas Traffic. The name chosen for the new organization was The Freight Claim Association, which on the following day, held its first annual session. On July 31, 1919, the American Railway Association established a Freight Claim Division, composed of the membership, officers and other organization features of the Freight Claim Association; however, the two bodies continued in existence concurrently until May 17, 1921, when by formal action there was an official merger of the older Association into the newer division. In the 1919-1921 negotiations, prior to the formal incorporation of the Freight Claim Association as a branch of the American Railway Association, Mr. Pilcher said, it was agreed that the new organization would be established as a full-fledged division of the American Railway Association and, in addition, should have established as one of its principal responsibilities, an organization to carry on activities looking toward the prevention of loss and damage of freight in transportation.

Others who addressed the meeting were William C. Fitch, general freight claim agent, Southern Pacific; H. R. Grochau, assistant freight claim agent, Chicago, St. Paul, Minneapolis & Omaha; A. R. McNitt, general freight claim agent, Union Pacific; W. C. Johnson, freight claim agent, Chicago & North Western, all past chairmen of the Freight Claim Division; and A. E. Passman, freight claim agent of the Erie, and chairman of the Division for the past year. In addition, papers prepared by J. D. Hooper, retired freight claim agent of the Southern, and W. L. Stanly, retired vice-president of the Seaboard Air Line, past presidents of the Freight Claim Association, and J. B. Baskerville, retired general claim agent of the Norfolk & Western, and past chairman of the Division, were read.

Streamlined Prevention and Settlement to Facilitate War Transportation

During the convention, action was taken to streamline the intracacies of claim prevention and settlement in an effort to reduce the work of claim departments and facilitate the movement of war materials. At the same time rules were adopted to prevent promiscuous filing of claims by certain classes of shippers and receivers who might take advantage of the co-operative spirit of the Division and the conditions precipitated by the war .

The committee on Freight Claim Rules, in its report commenting upon the situation said, "the most urgent and important matters to be considered, concern methods for the prompt handling of the division's organization affairs during the present war emergency, and for the

amending of provisions of existing freight claim rules with a view to relieving conditions that have been brought about by the large increase in the number of new claims received in past months. These tax to the utmost the forces and facilities in the various claim departments. Expedients should be adopted to minimize the work incident to the investigation of such claims in freight claim departments, accounting and operating departments, and local freight offices."

Recommendations made by the committee and approved by the members involved modification of provisions of certain freight claim rules that now require detailed investigation in order to determine individual carrier liability so as to restrict the investigations only to the establishment of carrier liability to claimants. These recommendations include absorption by the paying carrier of claims less than a certain amount; an increase in the present $1 minimum debit; prorate of claims under a given amount, such as $20, on a basis of exception reports or other destination records, without further investigation; curtailment of work involved in transmission of claim files to interested lines after payment and interline apportionment; elimination of requirements for the securing of seal records at intermediate points and in switch movements; and elimination of requirements for maintenance of certain records by the carrier transferring l. c. l. freight.

The committee on the Prevention of Loss and Damage, in commenting in its report on this phase of prevention, said, "we urge upon member carriers and their individual representatives the need for wholehearted cooperation under present war conditions, among ourselves, with the organizations set up as joint agencies, with bureaus or associations, with the shipping public, and above all with the governmental services, so that there may be rendered the highest possible type of transportation service in the interest of a successful prosecution of the war and for the general benefit of everyone. To this end, there is urgent need for studies by individual lines of their freight station operations with special reference to the checking, loading and stowing of less carload freight, as well as for careful supervision and control of the handling of cars in train and terminal operations, to assure that the carriers fulfill their responsibility of safeguarding materials necessary for the armed forces, as well as items needed for the health and welfare of the civilian population."

One of the major problems confronting the railroads, it was pointed out, are doubtful claims for loss or damage to fresh fruits, melons and vegetables which require many hours of investigation and settlement and which might increase in frequency and amount if rules governing the investigation and settlement of this type of claim should be relaxed. It was the consensus of opinion that the settlement of this type of claim be made in accordance with the reputation of the shipper and receiver, and that the claims of those failing to co-operate be refused.

Train Men to Reduce Lost Hours and Damage to Lading

The training of men in the proper performance of duties was advocated by W. J. Flannigan, superintendent of safety of the Northern Pacific, as a means of preventing accidents and lost time and damage to freight. "How can the safety department work with the freight claim department so that their work will bring about the most success?" he continued, "Let us, for example, take the every-day work of the safety department on the railroad. In the supervision of safety work in a yard, we have yard switching among the many problems to solve. Here we have a large force of men doing work requiring a great deal of skill and experience if it is to be done quickly and efficiently. One of the problems confronting us today is the new men who have been hired and who lack experience. These men must be trained, not only in the routine of their work, but also in safe practices that are so necessary in one of the most hazardous occupations on a railroad today. This training, among other things, consists of getting on and off cars and engines, the handling of hand brakes and the proper use of signals.

"The training of men in safety work is usually handled by the supervisors in the yards, at safety meetings and while the men are actually at work. We have tried to get the yard men themselves to help each other by calling attention to unsafe practices which they may notice in the work performed by their fellow workmen. It seems that it would be particularly necessary, in order to prevent freight claim damage in yard operation, to have competent yardmen work safely; in other words, if we fail properly to train a new man or supervise an experienced man to couple or uncouple cars in a safe manner, or control the speed of cars being 'kicked' through the proper use of hand brakes, or if we fail properly to train a new man or to supervise an experienced man to give signals which may be seen plainly and plainly understood, there will no doubt be rough handling in switching operations, and with rough handling there is no question but that there will be freight damage.

"It is much more simple and effective in educating employees to handle their work in an efficient manner, to teach them to understand that the violation of safety rules or transportation rules, which, after all, are but a prescribed course of safe practices and if followed will help them perform their work efficiently, will not so much result in discipline such as suspension for a period of time or dismissal from the service, but are more apt to result in a personal injury. Therefore, through such a violation they personally are the ones who will suffer the loss of time and pain from injury. Through such a campaign we will help to obtain strict compliance with the rules from the men operating in train, engine and yard service. Any degree of success will obtain proportionately not only a reduction of personal injuries, but also a reduction in freight loss and damage."

* * *

Flower Beds and Shrubbery Are Customary Sights on Canadian National Facilities. This View of the Transfer Table at the Moncton (N.B.) Car Shops Shows a Flower Bed in the Foreground and a Landscaped Knoll in the Background

Communications . . .

"Co-operation" By Unions and Managers

WASHINGTON, D. C.

TO THE EDITOR:

May I commend the *Railway Age* for the lucid and much-needed exposition of the Baltimore & Ohio union-management cooperation program which appeared in its issue of April 18. As was noted, the War Production Board's plan for joint committees properly falls into the pattern developed so successfully by the federated shop craft unions and the management on the B. & O. It seems probable that some of the confusion marking the inauguration of the WPB plan might have been avoided had the B. & O. experience been more widely publicized in recent years. According to reports in the New York Times, American business men have been writing to Great Britain for information regarding the "works councils" which have been newly established in a few British plants. This, despite the fact that the works councils, as described, differ in no whit from the labor-management committees which have functioned effectively for almost two decades in the mechanical departments of the Baltimore & Ohio and Canadian National Railways!

To complete the record, however, permit me to take mild exception to one point in your excellent statement. The view that "a plan of this kind can be more effectively applied in the mechanical department . . . than in some other departments of a railroad," carries an implication that is not justified. While it is true that the mechanical department has certain advantages as regards convenience and concentration of forces, there is abundant evidence to indicate that union-management cooperation can succeed in other departments provided the requisite "attitude of mind" exists.

The maintenance of way department of the Canadian National Railways is a classic case in point. It would be difficult to imagine a less promising setting for an experiment the success of which depends in large degree on the active participation of many individuals. Scattered over 24,000 miles of Canadian National roadway are hundreds of section gangs and bridge and building crews, many of them in the far reaches of the Dominion. Distances in Canada are truly magnificent. And anyone who has experienced a Canadian winter, even in the relatively temperature regions of Quebec and Ontario, can testify that distance is only one of the problems in the months from November to March. To the obstacles of distance and climate add those of language, education, and seasonal employment and one can realize some of the major difficulties involved.

In the light of all this, if the feasibility of union-management cooperation needs any demonstration, the experience of the C. N. R. maintenance of way department should supply it. The latest available records show that in the years from 1929 through 1940, 17,613 suggestions, 76.7 per cent of them coming from employees, were considered; 11,765 were adopted, 5,465 dropped, and the remainder classified as "still under consideration" or deferred for future reference. These results, it will be noted, compare not unfavorably with those of the longer-established programs in the mechanical departments of both the B. & O. and the C. N. R. Another and perhaps better index to the success of the plan is that it has become an integral part of the relationship between management and labor in both the mechanical and maintenance of way departments of the C. N. R. The question of its desirability is no longer even discussed. Neither management nor the unions would think of operating on any other basis.

Of course modifications were necessary to fit the circumstances of the maintenance of way department. Cooperative committee meetings are held by divisions and not at local points. To ensure the participation of all groups, employee representatives—termed "contact" men, selected through their local unions,—canvass the maintenance of way crews within each division prior to the scheduled meetings. In addition, suggestions are sent in by mail to these contact men or to the divisional conferences. Meetings are now held quarterly for the divisions and annually for the regional and system co-ordinating bodies. Some of the items for discussion are peculiar to the maintenance of way department. Housing conditions, for example, receive much attention, as do suggestions relating to employee education. This last item, incidentally, is illustrative of the non-measurable gains which both employees and management can secure from mutual efforts. Many employees otherwise well fitted for promotion to supervisory jobs were found to be illiterate; under the auspices of the cooperative program, the problem has been substantially solved—to the benefit of everybody concerned.

The basic pattern of the C. N. R. maintenance of way development is nevertheless identical with that of the original B. & O. plan: the provision of definite means whereby men and management can come together to discuss ideas and problems of mutual interest. As the Canadian National instance indicates, the plan is inherently flexible. The Rutland Railroad in Vermont for over a year has been holding cooperative meetings in which *all* the departments of the road are represented. By scheduling meetings to take account of the availability of the train crew members, the program has been maintained without serious difficulty. In the case of a small road like the Rutland, too, there is much to be said for bringing together for periodic conferences the representatives of various interests and points of view. Finally, to emphasize the point, joint cooperative meetings have been held in transportation and maintenance of way departments of the Baltimore & Ohio since 1925. Making allowance for the relative infrequency of these meetings as compared with those in the mechanical department, the record is good: 9,217 suggestions to April of 1941, of which 67.7 per cent were adopted.

All of this is in the nature of an addendum rather than a matter of issue, I am sure. In your words, "the frame of mind is everything." Given the frame of mind, solutions can be found for most real and apparent difficulties in the way of setting up a sound structure of union-management cooperation. This is important today, when the tendency of unions, managers, and everyone else is to avoid additional responsibilities even if desirable goals are within range. Like everything that is worth doing, cooperation takes time and thought and energy. But, it is here submitted, the results will adequately justify the effort.

One final word of elaboration: On the Baltimore & Ohio, the Canadian National, the Rutland, and in the industrial plants where the basic features of the B. & O. plan have been adopted, no managerial prerogatives have been invaded and no employee interests endangered. True, union-management cooperation is a step beyond the normal boundaries of employer-employee relations or conventional collective bargains, but is a sane and constructive step, no more revolutionary than democracy itself. In war time, above all, its extension is to be welcomed as another proof of the fundamental vitality of our way of life.

OTTO S. BEYER.

Maximizing the Capacity Of Passenger Equipment

CHICAGO

TO THE EDITOR:

I was greatly interested in the editorial, "How Maximize Passenger Capacity?" appearing in the April 4 issue of *Railway Age*. I agree fully with the thought behind that editorial, but I do not believe you have been fair to the railroads in the statistics that you have used, for the following reasons:

1. The railroad car miles, as reported to the Interstate Commerce Commission, include deadhead miles, as well as service miles, which I do not believe is true with the airlines' reports, which show that their loadings are a much higher percentage than the rail line loadings.

2. Practically all military traffic is one-way traffic, requiring a corresponding deadhead movement in the reverse direction, so that, while we may fill a sleeping car to its capacity (39 passengers), the final statistics will show a loading of but 19.5 for that class of cars. The loading of 39 is when the traffic is handled

for the Army. When the traffic is handled for the Navy or Marine Corps, the maximum loading is 27 passengers, as only one man is permitted in each berth; and, therefore, taking the deadhead miles with the service miles, an average loading of but 13.5 is reached.

3. You establish your percentages on a loading capacity of 72. It is believed that the average available seats in coaches, taking the country as a whole, is somewhat less than 72, and as the average revenue passengers per car mile are obtained by taking sleeping and parlor car traffic, as well as coach traffic, and as the available seats in sleeping cars and in parlor cars are somewhat fewer than in coaches, the use of 72 as a base is unfair.

4. It is not always simple to discontinue lightly patronized services to alternate methods. In most cases the lightly patronized trains are one-train-a-day lines, and must continue to be operated due to the insistence of regulatory bodies; second, under recent orders, buses cannot be substituted for rail travel, except in isolated instances, because of rubber shortage.

5. On many of the less patronized lines, particularly on branch lines, equipment is used which is of a class which could not be used on main and more heavily traveled lines, even though it were released from the branch line service.

H. W. SIDDALL,
Chairman, Trans-Continental and Western Passenger Associations

[In the editorial upon which Mr. Siddall comments so pointedly, it was not the purpose to criticize the carriers for having a passenger service load factor lower than that of their competitors—but rather to indicate that the railroads are handling more than their share of empty mileage. To require them to go to uneconomic lengths in this regard in peace times is unjust enough, but, in war time, when rolling stock is scarce, obviously the carriers should be permitted to use their equipment where the greatest demand for it exists—rather than continue lightly-used services. Quite likely, as Mr. Siddall suggests, it would be difficult to secure buses to replace unremunerative trains under present conditions. There would be less difficulty, however, if bus service were curtailed between large centers of population where it parallels economic railroad service, and without serving any public advantage except a purely arbitrary lower fare. Trains should not be used to do bus work, nor buses used to do trains' work, in a time when the supply of both forms of rolling stock promises to be short of the demand.—EDITOR.]

Union Rules and Wartime R. R. Efficiency

TO THE EDITOR:

I think you may be interested in reading the appended copy of a letter I have sent to my Senator and Congressman, inspired by Geo. Harrison's letter. I would ask that you leave out my name and town. This sort of a letter is enough to get a man cut off the seniority list, and it is my bread and butter to stay on. The railroads will not protect men who get in bad with the union leaders. In fact, many of our newer officials are former union leaders and think that everything is as it should be. So what I think as an American citizen is much different from what I must do and say as lowly junior supervisory officer.

NIGHT YARDMASTER

"Dear Senator:

"We have a letter today from the president of our labor union, Geo. M. Harrison, to write to you and the congressman to oppose certain labor bills now pending. I am going to comply with his request as to writing a letter, but I will fool him on the contents:

"1. I am a member of two railroad unions, and have been a member for many years. I am an officer of one and support the union in all legitimate objectives not inconsistent with my duty as a citizen.

"2. I am absolutely opposed to the closed shop check-off system. I am opposed to the idea of big initiation fees and think that the finances should be regulated by law.

"3. I work 12 hours a night, 72 hours per week for straight time, and like my job. I have worked in every humble capacity in my line, and after 26 years of service am a night yardmaster working rain or shine in a muddy railroad yard trying to get the job done, and to move the trains, to furnish cars for vital industries and the like. While I do this the Brotherhood of Railway Trainmen, 'Mr. A. F. Whitney's outfit,' throws a monkey wrench into the machinery. Some of the things they are doing to hinder the efforts of the railroad men who want to do the job are as follows.

"A. They have a rule against starting yard engines to work before 6.30 a. m., the effect of that here is to force the railroad to work engines when not needed and then pay overtime at peak hours. For instance, if you have a big plant that is ready to have its switching done at 11 a. m. or 1 p. m. the crews are not permitted to go to work at that hour. They must start at 6.30 a. m. and not later than 8 a. m., and the same way otherwise. I estimate this rule alone requires the employment of 5,000 extra men in U. S. A. and the use of 1,000 extra locomotives and the fuel that they consume, with no gain to anyone except some selfish few.

"B. They are rushing their sons in on extra boards and thus getting them deferred from army service. Many of these extra boards are not needed. I know of cases where a fireman and engineman is held off the board after he has worked 120 hours in fast passenger service, or turnaround service in one month and another man put on his job. Can you imagine that there is any reason why that man should be forced to lay off just to *make work* in an emergency such as this we now face? The only reason is that more men make more union dues and more union officers. Then there is the question of exempting union business agents and committee men from military service because of that service. In nine out of ten cases they are afraid to go because they know the men may put another man in and break up the clique that runs the local.

"Make strike votes secret. The recent railroad strike ballot was held in general in the following way: A burly group of the most radical element was appointed a committee. They ganged up around a man while he voted, and freely checked on him, telling the others how he voted. A secret vote, counted by an impartial authority, would seldom carry a majority.

"Cut out by law the rules in many contracts providing for unnecessary men. For instance, here we have two enginemen and three switchmen on an engine. Yet we are required to employ an air man simply to close two valves and cut one air hose in delivering cars from one line to another. This little item keeps thousands of men in railroad service and out of vital military or industrial service. There is not the slightest need in the world for the men, and the W. P. A. in its wildest days never used men so uselessly. Who pays—the U. S., the shippers, and the consumers. One switchman who stands and watches the man turn the anglecocks could do the job in two minutes just as well and as skilfully, but the B. of R. T. says "this is not our work." and some referee appointed by government officials to do the work of the railroad labor board will uphold such a contention and award thousands of dollars back pay for work never done by anyone.

"This all makes me red hot. I think a man should be paid good wages, and work decent hours, but I do not think that he should be permitted to set up restrictions like this just to suit the most radical of the lot. Not 10 per cent of the men approve this sort of stuff—where will it lead to, and what are we going to do about it? I really have no doubt that you will support legislation putting a stop to this sort of thing."

BACON AND EGGS for breakfast, steak or roast beef for dinner, ice cream for dessert—these are the favorite dishes of soldiers and sailors on the move, reports H. O. McAbee, manager of the Baltimore & Ohio's dining car department, after an analysis of the 40,000 meals served by his road to service men on troop trains in February and March. Soft drinks and beer are in great demand, but stewards get relatively few orders for higher powered beverages from men in uniform, he adds. In addition to providing meal service on troop trains, which require one diner for each 150 men on long trips, it is estimated, the B. & O. in the same two months experienced a 50 per cent increase in regular dining car business, and the road's diners traveled on an average over 400 miles a day.

NEWS

Carriers to Have 117,000 New Jobs

Beyer reports to Eastman that railroads will need 320,000 new men in 1942

"Already facing an acute labor shortage in many departments of maintenance and operation, American railroads are now confronted with the necessity of finding enough men to fill an estimated 117,000 new jobs for the remainder of 1942," said a statement issued last week by the Office of Defense Transportation. Current estimates, the statement added, indicate that employment in war industries will increase from about 7,500,000 to about 15,000,000 men and that about 4,000,000 men will be needed in the armed forces by the end of this year, thereby further complicating the railroads' man-power problem."

The situation was thus appraised by Director Eastman of ODT, upon receipt of a report by Otto S. Beyer, director of the Division of Transport Personnel, based on information obtained from the Interstate Commerce Commission, the Railroad Retirement Board, and the railroad industry.

Mr. Beyer's report indicates that aside from filling the 117,000 new jobs, 167,000 men will be needed to meet labor turnover, 22,000 more will be necessary to replace selectees, and 14,000 will be required to take care of vacations which many workers will be taking for the first time under the award of the Emergency Board in December, 1941. This makes a total increase of 320,000 men needed by the railroads for the rest of the year.

The estimates on the number of new jobs, Mr. Beyer pointed out, indicate a peak employment on Class I roads, in October, of 1,302,000 men, an increase of 111,000 over the I. C. C. figures showing the mid-month employees for March, 1942, as 1,191,000. It is forecast that employment in December will be 1,246,844 employees on Class I roads, an increase of 55,844 over March. On this basis, the report brings out that 111,000 jobs would have to be filled on Class I roads alone and, since these roads employ about 95 per cent of all railroad men, an estimated 6,000 new jobs will have to be filled on the remaining lines. The only data available on railroad turnover, according to Mr. Beyer, is based on the normal rate of attrition, or final separation of employees from the industry. This was placed at five per cent per year by the Federal Coordinator of Transportation. This definition of attrition excluded various types of temporary separation. If a turnover rate of one per cent is assumed, Mr. Beyer reported, and this is added to the five per cent figure, the resultant annual rate of 17 per cent, adjusted to three-quarters of the year remaining, yields a figure of 167,000 men. If the annual rate of turnover is greater, this figure would be subject to upward revision.

Estimates of the number of men required to fill vacancies resulting from the release of employees to the armed forces were based on the assumption that railroad men would be inducted in the same proportion as the total male population in the same age group. A further assumption was made, Mr. Beyer indicated, that 1,500,000 men would be inducted in 1942, or about nine per cent of an estimated 16,500,000 men in the age groups which may be most heavily drawn upon for selective service. The percentage, the report discloses, of railroad workers in these age groups in 1939, estimated from Railroad Retirement Board figures for employees with six months of service, or more, in that year, was applied to estimated employment in 1942 with a one per cent deduction for female employees. The estimate showed approximately 327,000 railroad men in these age groups.

Mr. Beyer pointed out that the above estimates indicate "the urgent necessity" for the railroads to adopt all practicable methods of self-help in meeting manpower requirements, including expanded training programs, recruiting of women, and more effective utilization of existing personnel.

Duplicate Passenger Service Under Scrutiny

Reduction of duplicate passenger service and the rearrangement of branch line service with a view to releasing passenger equipment for the war effort was considered at a meeting called by the Office of Defense Transportation at Chicago on May 4. The meeting was a forerunner of others which will result in the appointment of committees to study possibilities of adjusting passenger service to war conditions. John W. Barriger, III, associate director of the Office of Defense Transportation, who presided at the meeting, regarded branch lines as a reservoir of available railroad passenger equipment. "The branch lines," he said, "have a great reservoir of equipment, but at the same time the question of how to tap the reservoir, how to make the branch line adjustments, is one of the most significant of the immediate problems which we face." Mr. Barriger asked the railroads to submit suggestions as to how the ODT can keep itself informed of transportation needs or can help the railroads secure the maximum use out of existing equipment.

Eastman Flays Trade Barriers

Says train-limit and full-crew laws impede traffic; lays some blame on Carriers

Speaking before the federal-state conference on trade barriers and war restrictions on May 5, Joseph B. Eastman, Director of the Office of Defense Transportation, asked for the relaxation of train-limit and full-crew laws and state laws which provide for rigorous control over railroad passenger service, but criticized the railroads and their employees for being responsible for the enactment of some trade-barrier statutes affecting trucks and buses in an effort to "embarrass" the competition of such forms of transportation.

Also, at the same meeting, which was called by President Roosevelt to permit the states to discuss with the federal government, trade barriers as they affect the war, Donald Nelson, chairman of the War Production Board, criticized all of those state laws which impede the free flow of transportation from one state to another, and specifically condemned train-limit laws as slowing down the war effort.

During his discussion of the train-limit and full-crew laws, Mr. Eastman told the conference that the train-limit laws would cause the railroads to run shorter trains, thus using more locomotives when there is a scarcity of motive power; as for full-crew laws, he believed that the requirement of additional men on a train would cause the carriers great difficulty as the draft of manpower for the Army makes itself felt.

"When the need arises, as it soon will, if it does not now exist, for the conservation of all passenger equipment by the elimination of all passenger service which is not essential, the rigorous state procedures so often prescribed as a prerequisite to any such elimination may, in many instances," declared Mr. Eastman, "interpose prolonged delays before the conservation can be accomplished which will be necessary if all essential needs for service are to be met."

"Unfortunately—and I think it is well to be entirely frank about this matter—", continued the ODT Director, "the situation has been affected, at times to a controlling extent, by a factor which has nothing to do with the protection of the public safety or the conservation of highways, and that is the desire of the railroads to limit or embarrass the competition which they encounter from motor trucks and busses. The railroads and their employees, who are

(*Continued on page 922*)

Assumes Control of Tank Car Moves

With broad exemptions they will become subject to ODT orders May 15

Tank car movements will be placed on a general or special permit basis on May 15 under General Order No. 7 which was issued by Director Eastman of the Office of Defense Transportation on May 5. Broad exemptions, which Mr. Eastman said are "for the time being," are made for movements of petroleum into the Eastern seaboard area, into Washington and Oregon, and on tank-car movements of all commodities for distances of over 100 miles.

The order established in ODT a Section of Tank Car Service which will have charge of the nationwide control system. On and after May 15 no railroad will be allowed to accept for transport any loaded tank car without special or general permission of the Section except cars specifically exempted by the order. The aforementioned exceptions are embodied in an exception order (No. 7-1) issued simultaneously with the general order. The main order specifically exempts tank car shipments consigned by or to any government agency.

All railroads, tank car owners, leasing companies or lessees must stand ready to move any or all tank cars in their possession to any point designated by the Section of Tank Car Service, regardless of any contractual arrangements already in force. Any person or firm may apply for special or general permission to move cars not exempted by filling out forms to be provided by the Section. Such applications must show the extent to which other methods of transportation, including tank trucks, are available for the hauls involved, the efforts which have been made to obtain other means of transportation and other information.

In issuing special or general permits, the Section of Tank Car Service may specify commodities to be shipped, routes to be used, and other conditions of shipment. Where tank cars operated under the direction of the Section, their owners are protected from claims of violation of existing contracts.

It also was emphasized that issuance of a special or general permit will not guarantee a tank car will be available for the service contemplated. Such a permit merely will authorize movement of such a car over the rails.

In explaining the order, Mr. Eastman said:

"A shortage of tank cars exists by reason of the extraordinary demand upon railroad transportation to meet the needs of the public for petroleum products in the Eastern seaboard area and the states of Oregon and Washington.

"Not only are tank cars in great demand for petroleum service, but they are required for chemicals and other liquids of critical importance to the successful prosecution of the war. There is, for example, a growing production of alcohol used in the manufacture of powder. Tank cars must be provided in increasing numbers for transport of this vital commodity.

"Just before Pearl Harbor, petroleum products were reaching this (Eastern seaboard) area by tank car at the rate of 70,000 barrels a day. This figure has jumped to about 600,000 barrels a day. Approximately 44,000 cars are in this service in the Atlantic Seaboard area. Some of these have been borrowed from other service and some must be returned to other service as seasonal requirements demand. At the same time, steps must be taken to move an even greater volume of petroleum products into this vital area despite curtailment of tank car production.

"It is clear that the greatest possible efficiency must be attained in the use of the tank cars now available. Tank car efficiency depends not only upon expedited service by the railroads but to a very great degree upon the shippers themselves, for the shippers determine the origin points, the destinations, the volume and usually the routing. Detentions at points of origin and destination are definitely the responsibility of the shippers and consignees. Carefully and wisely planned movements can have the same effect as increasing the car supply. In fact, the saving of one car-day per trip for each tank car in petroleum service would be equivalent to adding 9,000 new tank cars to the present fleets.

"The demand for more tank cars for this or that service can be met only by putting every tank car, regardless of ownership, to its maximum useful service. Our Division of Motor Transport is surveying the tank car situation in all areas, and wherever possible tank trucks are replacing tank cars, particularly for the shorter hauls. The rubber shortage may place a limit on this substitution, but in this immediate emergency, tank trucks are proving an invaluable aid in the transportation of essential liquids."

Eastman Orders Taxicab "Cruising" Out for Duration

Asserting that "highly personalized" taxicab service cannot be maintained during the war, Director Eastman of the Office of Defense Transportation last week told taxicab operators that "cruising must be eliminated and dead mileage reduced to the lowest possible point."

Mr. Eastman expressed his confidence that the riding public would cooperate willingly with the operators "to save America's most flexible form of public transportation." He called for a stoppage of "nonessential riding," adding that "every effort must be made to encourage group or multiple riding so as to obtain the greatest possible efficiency from each taxicab."

"In the allotment of scarce materials," the ODT director went on, "taxicab service, like all other organized transportation, must be considered solely from the standpoint of necessity of service. With the entire American civilian economy being stripped of nonessentials, rubber and other replacement parts cannot be allocated to taxicabs until the operators and local regulatory authorities prove that present equipment is not being wasted in the performance of nonessential services."

General Order No 1 Amended by ODT

Changes include one further restricting use of cars for intra-terminal service

Use of box cars in any kind of intra-terminal freight movement where utilization of motor vehicles is possible has been prohibited by Director Eastman of the Office of Defense Transportation in an amendment to General Order No. 1 which establishes minimum loads for l.c.l. cars. This amendment along with other modifications was announced on April 30, the day before the order became effective.

Another change eliminates the exception whereby, under the original order, refrigerator cars could have been loaded to less than the minimum in the direction of their normal empty movement. Also, "clarifying changes" were made in other sections of the order, while a further modification requires the carriers to report, on a prescribed form, all intra-terminal cars handled under the order's exceptions.

The latter will allow the railroads to use closed cars for intra-terminal movements: (a) Where necessary to relieve freight house facilities because of inability to transport by motor vehicle; (b) where motor vehicles are not available; (c) where facilities of the railroad, the consignor or consignee are so located or constructed as to make motor vehicle transportation impracticable.

With the coming of the order's May 1 effective date, Director Eastman issued statements hailing in turn the "sweeping reductions in the use of closed freight cars for handling less-than-carload merchandise" which had already been effected "by nearly all railroads," and "the cooperation of the short lines in attempting to attain the objectives of the order." As noted in the *Railway Age* of March 28, page 665, the order sets minimum weight limits on loadings of l. c. l. cars, beginning at six tons on May 1, and rising to eight tons on July 1 and to 10 tons on September 1.

"Car loadings for the week ending April 23," said the ODT statement, "showed a decrease of 23.7 per cent in the number of merchandise cars loaded as compared with the same period a year ago. This reduction, achieved a full week before the general order's effective date, gave evidence of the cooperation of the railroads in the drive to eliminate the wasteful use of closed freight cars. Total car loadings for all classes for the week ending April 23, as reported to the Association of American Railroads, were 861,353, as compared with 721,627 for the same period a year ago, an increase of 19.4 per cent. Less-than-carload loadings for this period in 1942 were shown as 123,580, against 161,983 for 1941.

"Merchandise cars loaded by Class I railroads showed a reduction of 1.4 per cent for the five weeks ending January 31, 1942, and a reduction of 1.3 per cent for the ensuing four weeks in February as compared with similar periods of 1941.

(*Continued on page 919*)

Eastman Condemns Union Hold-Ups

ODT chief urges drastic penalties for those interfering with interstate commerce

Joseph B. Eastman, Director of the Office of Defense Transportation, appeared before a House judiciary subcommittee on May 1 to urge the passage of drastic legislation to curb the practice of racketeering by union representatives insofar as it affects the movement of goods in interstate commerce.

The subcommittee, headed by Representative Hobbs, Democrat of Alabama, is considering several bills, one sponsored by himself and carrying the number H. R. 6872, which were introduced following a recent decision of the United States Supreme Court to the effect that the present anti-racketeering statute does not apply to demands made by labor organizations for payments from employers under threat of duress.

Director Eastman told the subcommittee at the outset of his testimony that he had not had his views checked with the Bureau of the Budget to ascertain whether or not they coincided with Administration policy on the bills under consideration, but that he was appearing in support of the legislation both as an individual and as Director of ODT.

Not only did Mr. Eastman support the general philosophy of the bills but he offered a specific amendment which would provide a $5,000 fine or imprisonment for not more than two years or both for anyone convicted of attempting to hold up the free flow of interstate commerce. His amendment to the Hobbs bill would also give the President the power to call out the Army at any time to prohibit any interference with interstate commerce.

He also told the subcommittee that his office and the Interstate Commerce Commission had received thousands of complaints from truck operators to the effect that various labor organizations had forced them to either pay exorbitant charges for work not done and not needed, or to sign closed shop agreements. All of these complaints, he continued, were referred to the Department of Justice.

Another witness who told the subcommittee of the difficulties his company has been having with jurisdictional disputes between labor organizations and the resultant interference with shipments in interstate commerce was Albert M. Hartung, vice-president in charge of personnel of the Railway Express Agency. Mr. Hartung did not recommend any specific legislation but deplored the present situation where a jurisdictional dispute between the Brotherhood of Railway Clerks and the Brotherhood of Teamsters in Kansas City, Mo., has caused the R. E. A. great inconvenience and actual loss of business. He urged that legislation be passed by the federal government to cope with the general subject of jurisdictional disputes.

During the May 1 hearing Chairman Hobbs made public correspondence between himself and Attorney General Biddle in which the latter had refused to permit Assistant Attorney General Thurman Arnold to testify on the bills. Mr. Arnold's outspoken opposition to union racketeering is well known and has recently caused the Administration considerable embarrassment. Mr. Biddle took the position that the bills under consideration were not "departmental" bills and hence he could not permit Mr. Arnold to testify.

A. S. M. E. Semi-Annual Meeting —A Correction

The semi-annual meeting of the American Society of Mechanical Engineers will be held at the Hotel Statler, Cleveland, Ohio, June 8 to 10, inclusive. The name of the hotel was incorrectly given in the item on page 800 of the April 18 issue of the *Railway Age* in which details of the Railroad Division program were given.

Would Have War Workers Move Near Places of Employment

"Workers who make an honest effort to locate near their jobs will be making a real contribution to the war effort by helping to forestall any breakdown of vital transportation facilities," said Director Eastman of the Office of Defense Transportation in a recent statement. The ODT press release embodying the plea said Mr. Eastman had estimated that "millions of miles of travel could be saved on a national basis with proper cooperation in this phase of the conservation program."

Conference on Handling Ordnance Machinery

The Freight Container Bureau of the Association of American Railroads will hold a two-day conference at the Hotel Sherman, Chicago, on May 11 and 12, to discuss proper packing, marking and handling of machinery moving by rail to ordnance plants for the manufacture of war materials. Loss and damage prevention officers of more than 30 midwestern railroads, as well as representatives from the Office of Chief of Ordnance of the United States Army, will attend. This is the second conference of this type, the first having been held in New York last November.

Gulf, Mobile & Ohio Seeks Authority to Establish Air Subsidiary

The Gulf, Mobile & Ohio has sought Civil Aeronautics Board authority to establish a subsidiary air company, Rebel Air Freight, Inc. Air service, under the plan, will be provided in the general territory now served by the railroad, with a main-line mail and freight route from Chicago to New Orleans by way of East St. Louis, Ill., St. Louis, Mo., Memphis, Tenn., Birmingham, Ala., Montgomery and Mobile. Three other proposed routes will provide passenger, mail and freight service from East St. Louis to Memphis; to and from Memphis over Northern Mississippi and Tennessee, and from Jackson, Tenn., to New Orleans by way of Laurel, Miss., and Hattiesburg, and Bogalusa, La., and Covington.

Forwarder Report Adopted by Senate

Action on regulatory measure comes promptly after filing of conference agreement

The Senate on May 7 adopted the conference report on the freight forwarder regulation bill, which had been filed the previous day by Chairman Wheeler of the Committee on Interstate Commerce.

After months of delay, Senate and House of Representatives conferees on S. 210, the freight forwarder regulation bill, last week agreed to a conference report which was filed in the House on May 4.

The conference report writes a new bill which is a substitute for the differing Senate and House versions. The legislation thus proposed by the conferees would enact a new Part IV to the Interstate Commerce Act, providing for forwarders Interstate Commerce Commission regulation like that provided in other parts for railroads, motor carriers, and water carriers. Under the bill, railroads and other carriers subject to the Interstate Commerce Act would be permitted to control forwarders; although there is a stipulation to the effect that after the expiration of six months from the enactment date it shall be unlawful for any officer, director, employee or agent of any common carrier subject to Parts I, II, or III to have any interest in a forwarder, except directors' qualifying shares of stock.

Where control of a forwarder by another carrier exists, the bill also provides that no rate or practice of the controlled forwarder shall be held to be unlawful because of its relationship to such carrier. In other words there could be no I. C. C. finding like that in the Freight Forwarding Investigation to the effect that railroads, through their controlled forwarders, were charging rates different from those published in rail tariffs. Another provision relating to carrier-controlled forwarders is that requiring them to obtain I. C. C. authority to abandon services. "This subsection," said the explanatory statement of the House conferees, "was included for the purpose of more effectively carrying out the policy of preventing, so far as possible, consequences harmful to the public interest as a result of relationships between operating common carriers and freight forwarders."

Existing joint-rate arrangements between forwarders and motor carriers, which have been condemned in the much-suspended outstanding orders of the I. C. C., would be discontinued after a transition period of 18 months. The transition would be from such arrangements to the use of "assembling" and "distribution" rates which the bill would authorize carriers to publish for forwarders or others who utilize carrier services "under like conditions." The bill contains no "grandfather" date, while the operating authority obtained from the I. C. C. would take the form of a "permit"

(*Continued on page 920*)

Travel Restrictions Near, Says Eastman

Gives notice of "imminent" changes in existing passenger services

Restrictions on passenger travel, elimination of high-speed duplicating service on competing lines, lengthening of limited schedules to include more stops, and reduction or total elimination of all luxury equipment for the duration were declared imminent this week by Director Eastman of the Office of Defense Transportation.

In a May 3 statement Mr. Eastman pointed to the gasoline and rubber shortage as responsible for diverting to public carriers better than 50 per cent more passengers than were transported previous to Pearl Harbor. The statement follows:

"The time is rapidly approaching, and in some areas is already here, when limitations upon passenger travel and public passenger service must be imposed. Last year highway buses carried about 15 billion intercity passenger miles; railroads, 25 billion; and private automobiles, over six times as many as the public carriers combined. The peak of railway passenger traffic, except during the first World War, was 38 billion passenger miles, rising during the former war to 47 billion. At that time, the railroads had much more passenger-train equipment than they have now. The rubber and gasoline shortage, restricting automotive travel, is already diverting to the public carriers an increasing number of travelers who formerly depended on private cars. During the first few months of the war, travel over the public carriers has increased from 40 per cent to as much as 60 per cent in different areas. As a whole, the average is in excess of 50 per cent. As the travel and vacation season approaches and rubber and gasoline are further restricted, a great increase in the traffic demand is obvious.

"In view of the extensive military movements and the increase in war freight traffic, much of this demand cannot be met by the public carriers. The Office of Defense Transportation is actively considering steps to conserve the use of present passenger facilities and at the same time restrict and limit passenger travel.

"The major problem of readjustment confronting the railroads is drastic redistribution of passenger services through elimination of duplications in service on competing lines, both rail and bus, reduction or elimination of luxury equipment such as private, club, lounge, parlor, and sleeping cars, lengthening of limited schedules to include more stops, diversion to more important runs of such branch-line equipment as can be made available. Equipment unsuitable for heavy, high-speed trains will have to be used where possible in local shuttle service to transport war workers to and from urban industrial zones.

"Since essential military and civilian travel must not be impeded, it will be necessary to readjust schedules. This will undoubtedly call for fewer trains in some territories and districts, and perhaps the complete elimination of trains used for pleasure and other non-essential travel. Lengthened fast-run schedules with more stops will make it possible to take care of points formerly served by motor bus or by local trains.

"Where train service is discontinued, the affected communities must be served by bus. Thus the general rearrangement of passenger transportation which must be undertaken at once, necessarily involves close coordination of railroad and motor bus facilities in order to make the buses available for effective local service."

Vermont Publicizes Public Carrier Services

As a step in a program sponsored by Governor William H. Wills of Vermont to eliminate waste in travel, a committee has undertaken to prepare for general public distribution a folder that will describe all the common carrier passenger facilities available in that state, including railroads, air lines and bus routes—even the small local bus services not generally known outside the communities they serve. It is believed this device will increase the patronage of such facilities, contributing toward a substantial reduction in the number of private and total vehicle-miles traveled in Vermont.

I. C. C. Upheld on Stockyard Issue

The United States Supreme Court at its May 4 session has held in a six-to-three decision that the transportation of direct shipments of livestock to stockyards at Chicago is completed when the livestock is placed in unloading pens, that yardage charges assessed by stockyards are not subject to the jurisdiction of the Interstate Commerce Commission, and that the failure of the railroads to afford egress for direct shipments of livestock does not result in an unreasonable practice.

The case was that of Swift & Co. versus the United States, and the opinion of Justice Jackson upholds that of the lower court and the commission. Justice Douglas wrote a dissenting opinion in which he was joined by Chief Justice Stone and Justice Murphy.

Swift & Co. and Armour & Co. took the position that if they so desired they should be permitted to take their shipments of livestock at the Chicago Union Stock Yards without the payment of any yardage charge. The lower court and the commission had previously found that the practice of assessing a yardage charge was one of long standing and was not unreasonable, and the decision of the majority sustains this finding. A similar finding was made recently by the Court in the case of Armour & Co. v. Alton Railroad Company (312 U. S. 195).

Justice Douglas argued that the Court had much earlier determined that there was no justification for the assessment of yardage charges if a packer desired to take his livestock directly from the car to his packing plant. He urged that since passengers are not charged for going through a station in getting off a train, packers should not be charged a fee for removing their shipments of livestock.

Defines ODT Role in Rubber Saving

New Presidential order also puts private automobiles under Eastman

Duties of the Office of Defense Transportation with respect to the conservation of rubber were set out by President Roosevelt in a May 2 executive order which brings within the scope of ODT authority and responsibility all rubber-borne transportation facilities, including private automobiles as well as buses, trucks, and taxicabs.

With the issuance of the order, Director Eastman of ODT followed through promptly on May 5 to announce that he had established a Division of Transport Conservation to administer the new duties. The new division will be headed by John R. Turney, who has been director of the Division of Traffic Movement; and Mr. Turney will be succeeded in the latter position by Henry F. McCarthy, who moves up from associate director. Sketches of the careers of Messrs. Turney and McCarthy appeared in the *Railway Age* of January 17, the former on page 217 and the latter on page 218.

Under the order ODT is directed to: "Develop programs to facilitate the continuous adjustment of the Nation and its transport requirements to the available supply of transportation services relying on rubber"; and to "formulate measures to conserve and assure maximum utilization of the existing supply of civilian transport services dependent upon rubber, including the limitation of the use of rubber-borne transportation facilities in non-essential civilian activities, and regulation of the use or distribution of such transportation facilities among essential activities."

It will be the duty of the new Division of Transport Conservation, Mr. Eastman said, to formulate programs, policies, and measures with respect to the foregoing. Such programs, policies and measures will be carried into effect in part through established divisions of ODT, and in part through other agencies of the government, "especially the local rationing boards of the Office of Price Administration." In other words, the Division "is expected to work in close cooperation" with the Office of Petroleum Coordinator and the branches of the War Production Board and OPA "dealing with rubber, gasoline and passenger cars."

The order does not limit functions and authority of the chairman of the War Production Board under that section of the original order creating ODT which stipulated that the latter shall be governed as to the relative importance of deliveries required for defense by instructions issued by WPB; nor will it affect the Office of Price Administration's rationing authority over rubber. Meanwhile, however, it does provide that: "The several federal departments and agencies which perform functions relating to the conservation or use of rubber-borne transportation facilities shall,

(*Continued on page 921*)

3 Mo. Net Income Was $98,075,000

Net railway operating income in same period was $226,305,514

Class I railroads in the first three months of this year had an estimated net income, after interest and rentals, of $98,075,000, as compared with $69,034,952 in the corresponding period last year, according to the Bureau of Railway Economics of the Association of American Railroads. The three-months net railway operating income, before interest and rentals, was $226,305,514, as compared with $200,326,710 in the first quarter of 1941. The rate of return for the 12 months ended March 31 averaged 3.89 per cent, compared with 2.91 per cent for the 12 months ended March 31, 1941.

March's estimated net income was $48,230,000, compared with $35,256,352 in March, 1941, while net railway operating income for that month was $92,355,539, compared with $80,170,452 in March, 1941.

Total operating revenues in the three months was $1,483,457,296, compared with $1,152,106,851 in the same period in 1941, or an increase of 28.8 per cent. Operating expenses amounted to $1,036,583,955, compared with $807,887,616, or an increase of 28.3 per cent.

Class I roads in the three months paid $183,933,368 in taxes, compared with $112,455,618 in the same period in 1941. For March alone, the tax bill amounted to $74,531,987, an increase of $32,601,268 or 77.8 per cent above March, 1941. Thirty Class I roads failed to earn interest and rentals in the three months, of which 13 were in the Eastern district, one in the Southern district, and 16 in the Western district.

Operating revenues for March totaled $540,280,252 compared with $416,319,161 in March, 1941, while operating expenses totaled $360,150,541 compared with $283,328,538.

Class I roads in the Eastern district in the three months had an estimated net income of $42,939,000 compared with $55,688,811 in the same period last year. Those same roads had a three-months net railway operating income of $93,277,342, compared with $110,538,132 in the same period in 1941. Gross in the Eastern district in the three months totaled $712,672,074, an increase of 20.5 per cent compared with the same period in 1941, while operating expenses totaled $510,139,305, an increase of 26.1 per cent above 1941. Class I roads in the Eastern district for March had an estimated net income of $23,652,000 compared with $25,074,131 in March, 1941. Net railway operating income amounted to $40,561,585 compared with $43,520,961 in March, 1941.

Class I roads in the Southern district in the three months had an estimated net income of $22,371,000 compared with $18,333,529 in the same period last year. Those same roads in the three months had a net railway operating income of $38,842,920 compared with $34,650,454 in the same period of 1941. Operating revenues in the Southern district in the three months totaled $210,069,816, an increase of 29 per cent compared with the same period in 1941, while operating expenses totaled $141,034,125, an increase of 29.2 per cent. For March alone the roads in the Southern district had an estimated net income of $10,225,000 compared with $7,998,539 in March, 1941. Net railway operating income amounted to $16,099,311 compared with $13,756,466 in March, 1941.

Class I roads in the Western district in the first three months had an estimated net income of $32,765,000 compared with a deficit of $4,987,388 in the same period last year. Those same roads in the three months had a net railway operating income of $94,185,252, compared with $55,138,124 in the same period of 1941. Operating revenues in the Western district in the three months totaled $560,715,406, an increase of 40.9 per cent compared with the same period in 1941, while operating expenses totaled $385,410,525, an increase of 31.1 per cent above 1941. In the Western district for March alone the estimated net income was $14,353,000 compared with a deficit of $2,183,682 in March, 1941. Net railway operating income amounted to $35,694,643 compared with $22,893,025 in March, 1941.

CLASS I RAILROADS—UNITED STATES

	Month of March 1942	1941
Total operating revenues	$540,280,252	$416,319,161
Total operating expenses	360,150,541	283,328,538
Operating ratio —per cent	66.66	68.06
Taxes	74,531,987	41,930,719
Net railway operating income (Earnings before charges)	92,355,539	80,170,452
Net income, after charges (estimated)	48,230,000	35,256,352
	Three Months Ended March 31	
Total operating revenues	$1,483,457,296	$1,152,106,851
Total operating expenses	1,036,583,955	807,887,616
Operating ratio —per cent	69.88	70.12
Taxes	183,933,368	112,455,618
Net railway operating income (Earnings before charges)	226,305,514	200,326,710
Net income, after charges (estimated)	98,075,000	69,034,952

Trucks and Buses Exempt from Gas Rationing

All commercial and governmental users of gasoline are exempt from the card rationing plan to be inaugurated May 15 in 17 eastern states by the Office of Price Administration. This information was contained in a joint statement issued this week by the OPA and the Office of Defense Transportation.

"Trucks, buses and other commercial vehicles," declared the statement, "will not need ration cards to make gasoline purchases, and do not need to register. They are to be served gasoline in their tanks as usual. However, to avoid delay and confusion in the case of vehicles used commercially and in governmental service, but which may not be clearly marked, it has been provided that 'X' ration cards may be obtained. Such a card will enable them to make whatever gasoline purchases they need for 'essential use'."

Land Grant Repeal Met Tough House

Recommittal came after debate indicating much opposition to measure as drawn

The House of Representatives' April 29 action recommitting the Lea bill for repeal of remaining provisions of the land-grant-rate law came after debate wherein opposition to the measure as drawn seemed to have crystallized in response to arguments citing the potential cost in higher freight rates to the government, the relative current prosperity of the railroads, and the failure of the bill to provide for a return by the carriers of lands still held. As noted briefly in the *Railway Age* of May 2, page 865, the bill (H. R. 6156) was sent back to the committee on interstate and foreign commerce.

Recommittal came on a standing vote, recorded as 99 to 62, after three proposed amendments had been voted down. There was no roll-call vote. Whether or not the bill will come before the House again remains with the committee, although committees do not in such cases ordinarily bring back the same proposal. Two of the rejected amendments would have inserted provisos stipulating that railroads would not become eligible for relief from the land-grant rates unless they returned to the government granted lands still in their possession. Seemingly the opposition would be mitigated if the repealer were revised to include such a provision; but it might not then appeal to railroads called upon to give up their lands.

In order to get the benefits of the partial repealer embodied in the Transportation Act of 1940, the railroads relinquished claims to all lands which were in dispute with the government; but there was no requirement, such as that now proposed, that they give up any lands to which they had acquired undisputed title. The 1940 act left land-glant deductions applicable on "the transportation of military or naval property of the United States moving for military or naval use and not for civil use," and on "the transportation of members of the military or naval forces of the United States (or the property of such members) when such members are traveling on official duty." It was the uncertainty as to the present applicability of the law, and a recognition of the burden the railroads would assume in moving the great volume of war traffic at land-grant rates, that developed the sentiment favoring complete repeal which found expression in the committee's unanimous report recommending enactment of the complete repealer. As indicated above, the bill was sponsored by the committee's chairman—Representative Lea, Democrat of California.

The return-the-lands phase of the opposition's attack was bolstered by a proposed amendment along those lines which was suggested by Acting Secretary of Agriculture Grover B. Hill, who also wrote to the Speaker of the House a letter stating that the Department of Agriculture

(*Continued on page 919*)

Oil Movement Slows a Little

Carriers handle 564,750 barrels a day despite severe storm in the midwest

The tank car movement of oil into the east coast area averaged 564,750 barrels a day during the week ending April 25, according to an announcement by Petroleum Coordinator Harold L. Ickes. This was a decrease of 5.7 per cent over the preceding week, when the movement averaged 599,500 barrels daily and established an all-time high record for the seventh consecutive week.

Oil shipments from California to the Pacific Northwest, however, set a new record for the second successive week, increasing 22 per cent over the preceding week—from 23,980 barrels daily to 29,314 barrels daily.

The drop in car loadings destined for the east coast during the week was attributed primarily to two factors: First, part of the tank cars used to establish the high record of the previous week had not had time to return from New England to the Gulf and midwest loading points; and second, the severe storm that swept through the midwest and parts of the Gulf coast last week interfered with the handling of cars. Weather conditions, declared Mr. Ickes, were so severe that one company was unable to handle its loadings on a normal basis for two days.

In handling the week's movement into the east, the 21 oil companies participating loaded 17,575 cars. Including cars that were on the way back west for reloading, it is estimated that the east coast service was employing about 44,000 cars, taken largely from other parts of the country.

Testifying this week before the oil subcommittee of the House committee on interstate and foreign commerce on the general petroleum situation, Mr. Ickes said that his office hoped to get an additional 10,000 to 15,000 tank cars to relieve in some measure the east coast shortage. He also congratulated the railroads and the oil companies for the fine effort that is being made to make up the shortage of oil due to tanker sinkings, but he did not know how much more this movement could be increased or how long the present locomotive supply would hold out.

Meanwhile, Price Administrator Leon Henderson has amended Revised Price Schedule No. 88 to permit increases over established maximum prices on the eastern seaboard for fuel oils and gasoline. The action was taken to permit the petroleum industry to recover additional expenses incurred in moving petroleum and petroleum products eastward by tank car and other high cost transportation which has been substituted for tanker shipments curtailed by the war.

Passenger Conference at Chicago

There was a conference on passenger traffic problems at Chicago on May 4 between Western railroad representatives (chief executives and chief operating and traffic officers) and John W. Barriger and H. F. McCarthy of the ODT. The purpose was to canvass ways and means of maximizing railroad passenger service in western territory. Mr. Barriger explained that the ODT did not want to have morning reports on the passenger situation on every road in this territory, but that it did wish to be promptly informed of a chronic condition of running late and of any chronic condition of having to stand up coach passengers or having to turn away Pullman passengers.

There was some discussion of the desirability of curtailing duplicate competitive services, and cutting down on lounge cars. The suggestion was made that, if mail pay were "frozen," it might be easier for some of the carriers to co-operate in service curtailments. So far, there is no indication that seriously congested situations have arisen in this territory. The matter, it is understood, will be pursued further and with increasing vigor, both by the railroads and the ODT.

Who's Who in Army RR Service

Carl Gray lists the officers who will lead Military Railway Service

Carl R. Gray, Jr., executive vice-president, C. St. P. M. & O., paid tribute on April 29 to his fellow railway officers who have given up secure positions and favorable pay to respond to the call of country by entering railway military service. The organization and functions of the Military Railway Service, which will conduct railway operations for the United States Army in zones of military combat, were outlined by Mr. Gray at the convention of the Freight Claim Division at Chicago. Mr. Gray stated that he and a number of other railway officers attached to the Military Railway Service will withdraw from rail-

ENGINEERING HEADQUARTERS, FT. SNELLING, MINN.

Title in Service	Military Rank	Name	Previous title on railroad
	Staff to be activated May 15, 1942		
General manager	Appointment not yet made. (Brig. gen. under act)	Carl R. Gray, Jr.	exec. v.-p. C. St. P. M. & O., Omaha, Neb.
Aide-de-camp	1st Lt.	J. T. Hayes	trainmaster C. M. S. P. & P., Seattle, Wash.
Asst. to gen. mgr.	Lt. Col.	John R. Noyes	Corps of Engrs. regular army
Commander of headquarters detachment	1st Lt.	J. B. Lund	transp. insp. C. St. P. M. & O., St. Paul, Minn.
Mess officer	1st Lt.	A. M. Fransen	steward on C. & N. W. "400"
	Operating department		
Gen. supt. of op.	Col.	N. A. Ryan	gen. mgr. western lines C. M. St. P. & P., Seattle, Wash.
Asst. gen. supt. of op.	Lt. Col.	C. F. Dougherty	div. supt. M. P., Kansas City, Mo.
Supt. car serv.	Lt. Col.	B. H. Decker	div. supt. D. & R. G. W., Salt Lake City, Utah.
Supt. term.	Maj.	W. P. Wilson	div. supt. C. & S., Denver, Colo.
Supt. tel. & tel.	Capt.	C. C. Scheuble	trainmaster M. & St. L., Minneapolis, Minn.
	Mechanical department		
Chf. mech. off.	Col.	W. G. Knight	mech. supt. B. & A., Derby, Me.
Gen. supt. m. p.	Col.	J. K. Tully	asst. to v.-p. eng. research Pullman Co., Chicago, Ill.
Supt. car dept.	Maj.	F. E. Cheshire	asst. supt. car dept. M. P., St. Louis, Mo.
Asst. mast. car build.	Capt.	H. L. Thomas, Jr.	mech. eng. Penna., Philadelphia, Pa.
Asst. car dept.	1st Lt.	G. E. Hargraves	mech. eng's off. Penna., Philadelphia, Pa.
	Engineering department		
Eng. m. of w.	Lt. Col.	B. H. Crosland	div. eng. St. L. S. F., Ft. Scott, Kan.
Eng. m. of track	Maj.	E. T. Barrett	div. eng. D. & R. G. W., Pueblo, Col.
Eng. m. of bridges	Maj.	R. E. Sherer	div. eng. M. St. P. & S. S. M., Minneapolis, Minn.
Eng. m. of sig.	Maj.	J. R. Scatterday	div. eng. C. & O., Huntington, W. Va.
Supv. water serv.	1st Lt.	R. C. Carrick	chem. eng. R. F. & P., Richmond, Va.
Supt. wk. equip.	Capt.	E. P. Sima	supv. wk. equip. C. M. St. P. & P., Seattle, Wash.
Asst. eng. track.	1st Lt.	R. A. Sharood	rd. mast. N. P., Missoula, Mont.
	Stores department		
Gen. sto. keep.	Lt. Col.	E. F. McFadden	gen. st. keep. U. P., Pocatello, Idaho.
Fuel agent	Capt.	F. T. Richards	spec. purch. agt., P. R. R.
	Battalions		
711th Headquarters, training, Camp Claiborne, La. Activated June 15, 1941	Lt. Col.	C. K. Harding	reg. army
727th Southern, Camp Shelby, Miss. Activated March 15, 1942	Lt. Col.	F. W. Okie	div. supt. So., Birmingham, Ala.
713th A. T. & S. F., Clovis, N. M. Activated April 15, 1942	Lt. Col.	C. D. Notgrass	div. supt. A. T. & S. F., Newton, Kan.
753rd Ry. Shop N. Y. C., Bucyrus, Ohio. Activated April 15, 1942	Lt. Col.	E. T. Leake	C. C. C. & S. L. Shops, Indianapolis, Ind.
730th Penn., Ft. Wayne, Ind. To be Activated May 15, 1942	Lt. Col.	H. B. Stetson	supt. pass. trans. Penna., Philadelphia, Pa.

way duties on May 15, when Military Railway Service is activated, to devote full time to that service. Thus far, he said, one shop and four operating battalions have been activated. Another operating battalion and the engineering headquarters staff will be activated on May 15. Ultimately, he said, between 30,000 and 35,000 railroad workers and officers will be enlisted in the 42 operating battalions, 6 shop battalions, 10 grand division headquarters and 1 engineering headquarters, contemplated for Military Railway Service.

The officer personnel of Military Railway Service at present, Mr. Gray said, is set forth in the table on page 914.

Recommends 40 Cents Per Hour as Wage "Floor"

Recommending a minimum railroad wage rate of 40 cents per hour under the Fair Labor Standards Act, the report of a committee for the industry has been filed with the Administrator of the Wage and Hour Division of the U. S. Department of Labor following a two-day session in New York. If accepted, the recommendation would not have very startling results—because 46 cents was established as the minimum rate by the wage negotiations last December. The proposed 40-cent rate, therefore, would touch only those carriers —mostly short lines—which were not parties to last December's negotiations.

The 12-man committee, equally representative of unions, employers, and the "public," with George E. Osborne of Stanford University, one of the "public" representatives, as chairman, is the second for the industry appointed under the Act. The wage order of March 1, 1941, based on the recommendations of the first committee, provided for a minimum wage of 36 cents an hour for trunk lines, and 33 cents an hour for short lines, and resulted in increased wages for about 64,000 employees, mostly maintenance-of-way.

A public hearing will be held before the Administrator acts on the new committee recommendation.

ODT Forms Transportation Officers' Advisory Committee

Formation of a Transportation Officers' Advisory Committee, which will assist "in mapping plans for closer coordination of rail transportation and freight car handling," has been announced by the Office of Defense Transportation. Members of the committee are: J. D. Clarke, superintendent of freight transportation, Baltimore & Ohio; J. C. Wroton, general superintendent of transportation, Seaboard Air Line; F. E. Sperry, general superintendent of transportation, Chicago, Burlington & Quincy; and J. H. Little, superintendent of transportation, Missouri-Kansas-Texas.

The committee will meet from time to time with the Section of Freight Service of ODT's Division of Railway Transport. Its first meeting was held in Washington, D. C., on May 1, with O. C. Castle, assistant director of the Division, presiding.

Eastman Hits Rates Which Take Water Traffic

Director Eastman of the Office of Defense Transportation wants railroads to discontinue the practice of publishing rates designed to take traffic from water carriers. In that connection he recently wrote to President J. J. Pelley of the Association of American Railroads a letter requesting that the railroads give the matter "early consideration"; and that they submit to him plans which "might well include proposals to adjust all rail rates which are competitive with inland waterways to the levels existing before the subnormal rates were established, and to make and thereafter maintain whatever other adjustments in such rates may be required to accomplish the purposes of the order establishing this Office."

Mr. Eastman's letter opened with a reference to "continuing complaints from inland waterway carriers" to the effect that the railroads "are and have been engaging in the persistent practice of reducing rates on traffic which is competitive with the inland waterways to the point where the latter are compelled either to withdraw from participation in the traffic or to reduce their own rates to unreasonable levels."

"As you know," Mr. Eastman went on, "it is my responsibility to see to it that maximum utilization is made of the domestic transportation facilities of the nation for the successful prosecution of the war. Any conduct or practice which is aimed at or results in destruction or crippling of any existing facilities is antagonistic to that objective and must be eliminated or prevented. I feel strongly that no carrier or group of carriers, which will soon almost certainly be faced with demands of such magnitude as to overtax the capacity to perform, should establish or maintain rates which are primarily designed to divert traffic from other types of carriers to the injury or destruction of the latter.

"There is quite a legitimate place in our wartime economy for certain types of competitive effort, but any type which would result in hindering or impeding the war

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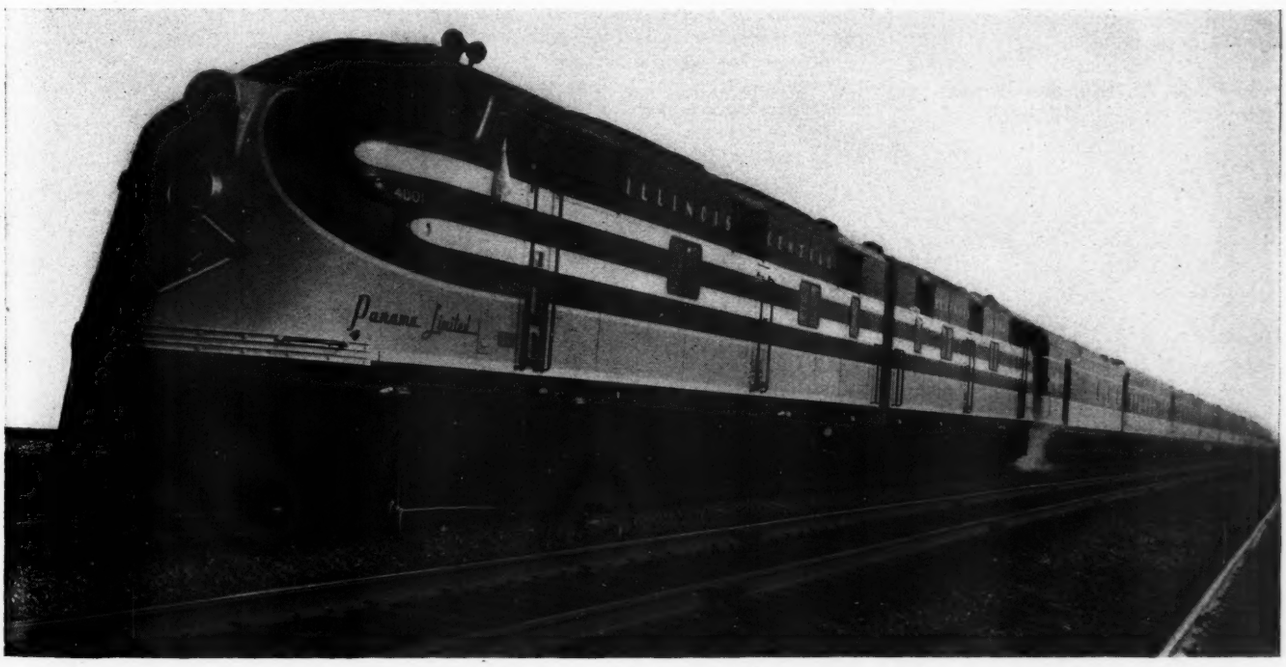

The New "Panama Limited" Made Its First Trip on May 3

The Illinois Central's Chicago-New Orleans train is novel in that no single car is devoted entirely to lounge space. Every one of the nine cars, except the diner, contains sleeping accommodations. The first car is a baggage-dormitory. The bar-lounge car contains three double bedrooms, a drawing room and a compartment and the observation car contains two double bedrooms, a drawing room and two compartments. Another innovation is a directory of names and business connections of passengers. Still another feature is the inclusion of a dinner in the extra fare.

effort by eliminating or unduly injuring any part of our existing transportation facilities is not among them. It is my judgment that the present volume of essential traffic is bound to increase in the future, while the ability to obtain necessary materials for the augmentation of existing transportation facilities is becoming increasingly limited. The co-existence of these two facts should discourage, rather than encourage, any such attempts at diversion."

Nine More Field Offices for ODT's Division of Motor Transport

Nine additional field offices have been opened by the Office of Defense Transportation's Division of Motor Transport, according to a May 1 announcement. This brings to 25 the total number of such offices thus far opened, locations of the initial 16 having been previously announced as noted in the *Railway Age* of April 25, page 830. Plans call for the eventual establishment of 51.

The nine offices announced last week are in Detroit, Mich., Los Angeles, Calif., St. Louis, Mo., Baltimore, Md., Philadelphia, Pa., Louisville, Ky., Memphis, Tenn., New Orleans, La., and Seattle, Wash.

Frisco Fingerprints Employees

More than 3,000 employees of the St. Louis-San Francisco have voluntarily been fingerprinted during the past two weeks under a program instituted by the road's fingerprinting bureau. Under a policy adopted on March 17, all new employees entering the service of the road are required to have their fingerprints recorded. The plan was established as a service to employees and their families as a positive means of identification. One set of prints is retained in the railroad's files and another is kept in the civilian identification file of the Federal Bureau of Identification. The railroad's fingerprinting bureau was established in 1914.

T. P. & W. Dispute Heard by Justice Hilliard

Arbitration hearings on the labor dispute on the Toledo, Peoria & Western were begun by Benjamin C. Hilliard, judge of the Colorado Supreme Court, at Chicago on May 5, without George P. McNear, Jr., president of the railroad, or a representative of the carrier in attendance. When the hearing was called to order on the first day, Judge Hilliard said, "We are embarrassed because the carrier does not appear. I would prefer it otherwise. However, the company will be welcome at any time during the hearing. We will recess until 10:00 a. m. tomorrow and if the carrier does not appear, the hearing will proceed at that time."

By agreement between the Brotherhood of Locomotive Firemen and Enginemen and the Brotherhood of Railroad Trainmen, the former presented its case first. The Brotherhood of Locomotive Firemen and Enginemen bases its case on the contention that its members employed on the T. P. & W. perform the same work as do similar employees on Class I railroads, and that, therefore, they are entitled to the same wages and working conditions. In presenting its case, this Brotherhood introduced an exhibit comparing a schedule of rates of pay and working rules proposed by the Brotherhood for application on the T. P. & W. and the rates of pay and working rules ordered into effect by the government upon seizure of the railroad. The proposed schedules included rates of pay based upon weight of locomotives on drivers as adjusted to include the increase awarded by the Emergency Board. The rates of pay and working rules ordered into effect by the government were those which had been negotiated by the railroad and the locomotive engineers on August 1, 1929, and by the railroad and the locomotive firemen on January 1, 1931.

Appointments to ODT's Division of Railway Transport

James B. Sweeney, former vice-president and traffic manager of the Merchants & Miners Transportation Company, and A. R. Pelmar, former general superintendent of freight terminals for the Chicago & North Western, have been appointed by the Office of Defense Transportation's Division of Railway Transport to the positions of rail terminal supervisors at Baltimore, Md., and Philadelphia, Pa., respectively. At the same time, ODT announced the appointment of George Shamberger, Jr., as supervisor of port conditions at Baltimore, and that of Donald Jenks, who has a like assignment at Philadelphia.

These four appointees, said ODT, will "work with railroads, steamship lines and government agencies in Baltimore and Philadelphia terminals to expedite rail and water traffic."

Eastman Prepared to Assure Cargo Space for Lake Ore

General Order No. 8, which bans all grain movement over the Great Lakes except by special permit, was issued by Director Eastman of the Office of Defense Transportation on May 7 with a May 15 effective date. The order is designed to assure cargo space for the preferential movement of iron ore and Mr. Eastman said that "diversion of grain tonnage to the railroads will be necessary." While he anticipates that some re-adjustments in rail operations may be required, he is confident that he can count on the carriers which have thus far "met every freight emergency with remarkable efficiency."

Having been directed by the War Production Board's Division of Industry Operations to give preference to the transportation of 88,000,000 long tons of iron ore during the 1942 season, Director Eastman of the Office of Defense Transportation announced on May 2 that he stood ready to set up a permit system to control and curtail Great Lakes shipments of grain, coal and other commodities, if such a program is necessary to protect the ore movement. Under the executive order which created it, ODT is required to be governed as to the relative importance of deliveries required for war purposes, by "such instructions, certifications and directives" as may be issued by WPB.

The ODT announcement of May 2 told of Mr. Eastman's "grave concern" over the ore transport problem, and went on to say that grain movements by water from upper lake ports would have to be curtailed, that port-to-port movements of coal on Lake Erie would probably have to be eliminated, and that the handling of other tonnage to other ports would have to be diminished in the interest of the ore movement. Mr. Eastman considers the situation "of such seriousness" that he has requested the War Shipping Administration "to exercise on behalf of ODT, the powers necessary to control ore movements, including the power to requisition ships if such action becomes necessary." The estimated May tonnage of ore shipments is 13,000,000 tons.

Eastman Calls for Cooperation on Boston Wool Situation

Wool dealers, shippers, cooperative organizations and mills have been called upon by Director Eastman of the Office of Defense Transportation to do everything within their power to prevent arrival in the Boston, Mass., area of more wool than they can handle without delay and with minimum storage and warehouse requirements. The statement, issued May 1, called attention to the growing needs of the armed services for warehouse facilities and to the necessity for quick release of freight cars used in transporting wool.

Mr. Eastman cautioned that the situation not only in the Boston area, but in the wool-producing areas of the West as well, will be under the "constant scrutiny" of ODT. "While it is hoped that voluntary cooperation of shippers and receivers will eliminate the necessity of an embargo on wool shipments to the Boston area," he said, "it should be clearly understood by all concerned that such action will be taken promptly and decisively if any signs of trouble appear."

1,300-Car Increase in Coal Loadings

Public response to the "Buy Coal Now" campaign produced a 1,300-car increase in coal car loadings during the week ended April 25, over the previous week, according to an announcement by Luther Harr, Bituminous Coal Consumers' Counsel.

"This gratifying increase, which has reduced the car surplus almost to the minimum, means a production during that week of close to 11,500,000 tons of bituminous," declared Mr. Harr. "It indicates virtually 100 per cent utilization of coal transport facilities. Coal and transportation officials agree that if weekly production can be maintained during the spring and early summer at 11,000,000 tons, possibility of shortage next winter will be virtually eliminated.

"With April production averaging well above this 11,000,000-ton figure," he concluded, "danger of heatless days next winter is being substantially reduced. To all participating in this campaign—the coal industry, the railroads, the consumer groups, and the other government and private

agencies—great credit must be given for facing and meeting a dangerous situation boldly. The campaign will continue without abatement until all possible steps to assure an adequate supply of coal next winter have been taken."

Roy B. White Addresses Bankers

Roy B. White, president of the Baltimore & Ohio, and Thurman W. Van Metre, professor of transportation at Columbia University, on May 7 spoke at sessions of the economic conference of the National Association of Mutual Savings Banks, meeting in New York.

Mr. White gave the bankers a picture of railroad achievements under wartime conditions, and paid tribute to the co-operation of shippers and government agencies. "I do not remember a time since my connection with the industry," he declared, "when all of the agencies affecting our transportation machine have worked more sympathetically, or with greater singleness of purpose, than they are working at this time."

Stressing the influence on the available car supply of increased car movement, he said, "If all freight cars could be kept moving just one-half hour per day more than they now are moving, that would increase the available car supply by about 340,000 cars—more than all the car shops in the country could turn out in two years."

Looking ahead, Mr. White remarked that "no one is wise enough to foresee the degree to which government control will be extended over business when the war ends. Highway transportation already is regulated in part. It is reasonable to believe that control will be extended and enlarged so that railroad and highway transportation will be developed and protected in their proper spheres, and the nation provided with the best possible facilities in time of peril as well as peace."

Increase Use of Inland Waterways Urged in Congress

The subject of the increased use of inland and intracoastal waterways to alleviate the current oil shortage on the east coast is receiving considerable attention in the Congress as the situation daily becomes more acute.

On April 30, Senator Shipstead, Republican of Minnesota, took the floor to urge the greater use of the inland waterways to carry oil by barge to the eastern seaboard. It was Senator Shipstead's contention that oil for the Atlantic seaboard from the southwest can be transported at lower cost via the inland waterways than by the proposed pipe lines.

Meanwhile, Senator Maybank, Democrat of South Carolina, has introduced Senate Resolution 241, which would authorize the Senate commerce committee to make a "full and complete investigation and study of means by which the inland waterways of the United States may be more fully utilized, with a particular view toward providing for increasing the use of existing waterways for the transportation of petroleum products and other articles and commodities."

Also, Representative Rivers, Democrat of South Carolina, has offered in the lower house House Resolution 476, which would direct the House naval affairs committee to make a complete study and investigation "with respect to the petroleum requirements of the United States Navy on the east coast of the United States, with particular reference to sources of supply and methods of transportation, and the feasibility of the construction of a pipe line or pipe lines to deliver petroleum and petroleum products at Charleston, S. C.; Norfolk, Va.; New York City; Philadelphia, Pa.; Boston, Mass.; and other points on the Atlantic seaboard, at which are located naval industrial or operating bases, from the Texas and midcontinent oil fields, or the refineries located in Texas, Louisiana, and Arkansas." The committee is also authorized to look into the means other than pipe lines whereby the east coast shortage may be alleviated.

1941 Theft Claims Lowest on Record

Despite the fact that freight traffic in 1941 was the greatest on record, claims paid by the railroads in that year as a result of theft of freight amounted to only $376,490, the smallest amount for any year on record, according to the Protective Section of the Association of American Railroads.

This was a reduction of $31,252, or 7.7 per cent under the previous record established in 1939, when the total amount of such claims paid by the railroads was $407,742. It also was a reduction of $47,429, or 11 per cent, compared with 1940. In 1921 claims resulting from theft of freight totaled $9,924,747.

The amount of such claims paid in 1941 was three-tenths of one mill for every ton of revenue freight originated by the railroads. In 1921, the average was 1.06 cents per revenue ton originated.

In the past 20 years there has been an almost constant reduction in the amount of claims resulting from theft of freight. "The reduction in 1941, compared with the preceding year," said the A. A. R., "took place despite an increase of approximately 27 per cent in the volume of freight traffic. It was brought about largely because of increased efficiency of the police organizations maintained by the railroads, their vigilance in guarding the billions of dollars worth of freight which the rail carriers transport annually, and the increased cooperation of shippers in the better packing of freight."

Would Plan Maintenance to Avoid Tightening Farm-Labor Supply

Director Eastman of the Office of Defense Transportation this week appealed to the eight major railroads serving the Southwest Region to spread their maintenance-of-way work so that peak track-labor needs will cease to conflict with the top employment demands for farm labor. Mr. Eastman's letter to the rail executives resulted from a report compiled by Otto S. Beyer, director of the ODT's Division of Transport Personnel, which stated that, from available employment statistics, "maintenance-of-way operations in the southwest are scheduled with less regard for the months of peak demand for agricultural labor than would be desirable in the interests of both the railroads and agriculture."

A check made by Mr. Beyer showed that in 1941 five Southwestern roads all used over 50 per cent more section and extra gang laborers during August, September, October, and November, than at any other time during the year—a period when the farm sections served by these roads experience their greatest need for workers. "In general," said the report, "these railroads are using the greatest number of maintenance-of-way workers when they are hard-

* * *

B. & M. Wins First "Minute Man" Flag in New England

The Boston & Maine on May 1 raised over North Station, Boston, the first official War Savings Bond flag to fly in New England. Signifying that over 90 per cent of the line's employees are enrolled for bond purchases under the payroll deduction plan, the blue flag features (appropriately enough for the B. & M.) a "Minute Man" in white, inclosed in a circle of 13 stars.

est to recruit, and the least number when they should be easiest to recruit."

Calling attention to the mild weather prevalent in the Southwest through the winter months, Mr. Eastman asked that the railroads plan as much track and roadbed work as possible from January through the spring and early summer months when agriculture's demands are low.

Freight Car Loadings

Loadings of revenue freight for the week ended May 2 totaled 858,904 cars, the Association of American Railroads announced on May 7. This was a decrease of 2,449 cars, or 0.3 per cent, below the preceding week, but an increase of 64,605 cars, or 8.1 per cent, above the corresponding week last year, and an increase of 193,357 cars, or 29.1 per cent, above the comparable 1940 week.

As reported in last week's issue, loadings of revenue freight for the week ended April 25 totaled 861,353 cars, and the summary for that week, compiled by the Car Service Division, A.A.R., follows:

Revenue Freight Car Loadings

For Week Ending Saturday, April 25

District	1942	1941	1940
Eastern	172,388	160,102	141,774
Allegheny	192,287	154,993	130,974
Pocahontas	58,140	16,814	46,523
Southern	133,118	106,762	99,109
Northwestern	125,373	127,368	83,534
Central Western	116,651	106,566	97,899
Southwestern	63,396	49,022	44,991
Total Western Districts	305,420	282,956	226,424
Total All Roads	861,353	721,627	644,804
Commodities:			
Grain and grain products	35,677	33,763	35,936
Live stock	13,785	12,540	12,352
Coal	169,659	39,440	117,338
Coke	14,048	9,141	7,871
Forest products	51,260	40,432	33,718
Ore	70,911	75,385	20,881
Merchandise l.c.l.	123,580	161,983	148,637
Miscellaneous	382,433	348,943	268,071
April 25	861,353	721,627	644,804
April 18	846,562	708,793	628,468
April 11	814,233	679,808	619,105
April 4	828,890	683,402	602,835
March 28	804,746	793,803	628,921
Cumulative Total, 17 Weeks	13,503,523	12,180,615	10,665,742

In Canada.—Carloadings for the week ended April 25 totaled 63,802, as compared with 63,838 in the previous week and 60,593 in the corresponding week last year, according to the summation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
Apr. 25, 1942	63,802	32,723
Apr. 18, 1942	63,838	33,426
Apr. 11, 1942	62,907	30,767
Apr. 26, 1941	60,593	27,782
Cumulative Totals for Canada:		
Apr. 25, 1942	1,045,297	542,455
Apr. 26, 1941	931,067	487,418
Apr. 27, 1940	806,297	414,485

Relief from Rule Requiring Complete Rate Schedules at Every Station

Relief from that regulation which has required railroads to maintain at every station where an agent is employed a complete file of all rate and fare schedules has been afforded by the Interstate Commerce Commission in an order issued April 30. The order rescinds the October 17, 1941, order which had denied the plea for relief filed by the railroads on October 16, 1940, as noted in the *Railway Age* of October 26, 1940, page 601.

The commission regulation has been in effect since 1915; and the railroad petition for relief came shortly after passage of the Transportation Act of 1940, which repealed that former provision in section 6 of the Interstate Commerce Act that had required railroads to furnish upon request a written statement of the rate applicable to a described shipment, and to keep posted in every freight station the name of a resident freight agent.

Under the commission's present order, railroads may discontinue the posting of any tariff (except tariff indices and lists of tariffs) at stations "where investigation shows that such tariffs have not been used." The carriers must, however, within 10 days after receipt of a request therefor post at any station any rate of fare applicable from such station. The order also embodies a list of the larger railroads and the points at which each will still be required to maintain complete tariff files. Other roads must maintain complete files at at least one point on their lines; while all roads must post in each station a notice telling where the complete files are maintained.

W. P. B. Official Claims Freight Cars Used for Storage

Colonel John S. Coneybear, field representative of the War Production Board in New York, has authorized publication in New York newspapers of reports that "many thousands of railroad cars are tied up on sidings and at docksides storing materials ordered by foreign nations and held up by the shipping embargo."

Col. Coneybear is attached to an office of the Inventory and Requisitioning Branch of the W. P. B., set up in New York for the primary purpose of locating scarce strategic materials not being put to use in the war production program, and diverting them to points where they are urgently needed. In the course of his investigations, Col. Coneybear is collecting from the railroads serving the Port of New York abstracts of bills of lading covering all carload shipments for export on which delivery is delayed.

While he hands the railroads a bouquet for their co-operation in this extra statistical job, the Colonel professes not to be so favorably impressed by their accomplishments in getting cars unloaded promptly. Figures supporting his "many thousands of cars" statement are not made public for reasons of wartime policy, but it appears on examination that they do not distinguish between carload quantities of freight and loaded cars—in other words, they include shipments on the ground as well as on wheels. Moreover, the figures embrace not only embargoed export goods but also certain United Nations war materials awaiting bottoms for movement abroad.

Reports from railroad sources afford no evidence of excessive use of cars for storage purposes. There has been no increase in recent months in the number of cars awaiting unloading at New York and the total is not of consequential size. Daily records of the A. A. R. port traffic office at New York indicate that no more such cars were reported awaiting unloading at the end of April than on many other days picked at random over recent months. At the same time the volume of export traffic, including lease-lend shipments, has steadily increased. March figures for all United States ports, the most recent released by the Department of Commerce, show a gain of 28 per cent over February, and the total for the first quarter of 1942 is the highest for any three-month period since 1920.

Carriers to Train Military Railroaders

Major railroads of the United States are cooperating in the establishment of the Military Railway Service, Corps of Engineers, according to a recent War Department announcement.

Initially, the Southern, the Atchison, Topeka & Santa Fe and the Pennsylvania each will train an engineer battalion (railway operating), while the New York Central will train an engineer battalion (railway shop), the announcement said.

Headquarters for the Military Railway Service will be opened at Fort Snelling, Minn., this month. Colonel Carl R. Gray, Jr., Engineer Reserves, formerly executive vice-president of the Chicago, St. Paul, Minneapolis & Omaha, has been called to active duty and will be in charge of the service. He will have direct charge of training all men for the Military Railway Service.

In addition to the four battalions to be trained by the railroads, the Corps of Engineers is training a battalion in Louisiana. The 711th Engineer Battalion (railway operating), originally was formed at Fort Belvoir early last year. Later in the year the battalion was sent to Louisiana where the Government bought and built a short railroad, now known as the Camp Claiborne-Camp Polk.

Each operating battalion is made up of headquarters and service company and three additional companies whose combined operations are the same as the operation and maintenance of a railroad division, it was pointed out.

The shop battalion also consists of a headquarters company and three additional companies performing equivalent functions to the "back shop" of the railroad, handling the heavy repairs on locomotives and cars.

This program is expected to furnish a number of Engineer Battalions composed of men who know every phase of railway operation and are able to perform it under actual war conditions, the announcement concluded.

Program for Superintendents' Convention

The American Association of Railroad Superintendents has prepared an unusually timely program for its forty-eighth annual convention which will be held at the Hotel Stevens, Chicago, on May 12-14. Highlights in the program include an address by J. B. Eastman, director, Office of Defense Transportation, at the annual luncheon on Wednesday, May 13, and the pro-

gram on Wednesday, which will be devoted primarily to problems of car supply. The program follows:

TUESDAY, MAY 12

Morning Session—10 a. m.

Convention called to order.
Opening address on The Job We Face, by J. M. Symes, vice-pres., Western Region, Penna.
Address by the President.
Report of Secretary-Treasurer.
Report of Committee on Fuel Conservation in the Light of 1942 Conditions; R. H. Boykin, chairman (div. supt., Erie).

Afternoon Session—2 p. m.

Report of Committee on Personnel Problems of the Superintendent in Handling the Defense Load; H. E. Roll, chairman (chief personnel officer, M. P.).
Address on Safety in a Period of Expanding Traffic, by C. E. Hill, gen. safety agent, N.Y.C.
Report of Committee on Operating Rules; T. M. Flynn, chairman (supt., N. P.).

Tuesday Evening—8 p. m.

The program will be devoted to blackouts and other forms of protection of railway properties during war time, featured by an address by Dr. Samuel G. Hibben, director, Applied Lighting, Westinghouse Electric & Manufacturing Co.

WEDNESDAY, MAY 13

Morning Session—9:30 a. m.

Utilization of Equipment

Report of Committee on Getting Greater Use from Locomotives; E. H. Piper, chairman (asst. to vice-pres., C. B. & Q.).
Report of Committee on Securing Maximum Utilization of Freight Cars; F. P. Little, chairman (supt., P. M.).
Address on The Problems of Car Supply, by W. C. Kendall, chairman, Car Service Division, A. A. R.

Luncheon—12:30 p. m.

Address by Joseph B. Eastman, director, ODT.

Afternoon Session—2 p. m.

Address on L.c.l. Traffic and Car Supply, by J. R. Turney, Head, Division of Traffic Movement, ODT.
Address on Keeping Our Own House in Order, by F. H. Schleifer, gen. chairman, Midwest Shippers' Advisory Board and chairman of the Vigilance Committees of that board.
Address on The Grain Situation As It Affects the Railways, by L. M. Betts, mgr., Closed Car Section, Car Service Division.

THURSDAY, MAY 14

Morning Session—9:30 a. m.

Report of Committee on The Superintendent's Responsibility for Public Relations; C. H. Lee, chairman (supt., N. Y. C. & St. L.).
Report of Committee on Reducing Station Delays to Passenger Trains; K. A. Borntrager, chairman (supt., N. Y. C.).

Afternoon Session—2 p. m.

Report of Committee on Prevention of Damage to Freight—The Superintendent's Responsibility; J. G. Woodall, chairman (supt., Southern).
Report of Special Committee on The Rough Handling of Cars; R. O. Jensen, chairman (asst. supt., M. St. P. & S. S. M.).
Closing business.

Hershey Lists Carrier Employees as "Necessary Men"

Declaring railroad transportation and coal production are activities vital to the success of the Nation's war effort and listing "critical occupations" within these industries, Major General Lewis B. Hershey, Director of Selective Service, has advised state directors that persons engaged in the listed occupations may be considered for deferment from military service as "necessary men."

The "critical occupations" in the railroad industry, as certified by the Office of Defense Transportation, total 79, ranging from "apprentice" to "yardmaster."

"These critical occupations are such that, unless they are filled by men with the required degree of training, qualification, or skill, a serious loss of effectiveness in the activities of these industries will result," General Hershey declared. He also stressed that "because of the essential character of the training necessary to qualify persons to replace those in these occupations," local boards should consider the estimated period of training and experience required for each occupation. These periods of training or experience are indicated after each occupation on the lists sent to the state directors.

The memorandum concerning the railroad industry made the following statement:

"Railroad transportation is an activity necessary to war production and to the support of the war effort. This activity is responsible for the transportation of materials and products to and from industrial plants, for the transportation of material and personnel in the prosecution of the war, and for the transportation for commodities necessary to the support of the war effort."

In considering occupational classification of persons in the railroad industry the memorandum also advised that local boards should take into account that the railroad activity is subject to seasonal "peak" and "slack" periods of operation.

Announcing that local boards have been instructed to consider the coal and railroad industries as activities necessary to the support of the war effort, National Selective Service Headquarters emphasized that the question of deferring any individual registrant engaged in those industries must be decided by his local board on the facts concerning his individual case and conditions in the local area. No group or class deferments for occupational reasons are permitted under the Selective Training and Service Act, it was pointed out; no deferment can be made for a period longer than six months, and any deferment is revocable at any time the status of the registrant is changed.

General Order No. 1 Amended by ODT

(*Continued from page 910*)

For the week ending March 28, immediately following the order's issuance, the Class I railroads showed a 10.9 per cent reduction from less-than-carload loadings for that week in 1941, and in the week ending April 11 the reduction figure climbed to 18.1 per cent."

Commenting on that section of the order which requires carriers to submit plans for individual or joint action in handling l. c. l., the ODT statement said Mr. Eastman had noted "that, almost without exception, the railroads had surveyed both main and branch lines and had already instituted, or would institute prior to May 1, revised car schedules designed to accomplish the objective of the order." The statement quoted Mr. Eastman directly as saying: "That the carriers are accepting full responsibility, and are complying with the spirit of the order as well as the letter is both commendable and gratifying."

Likewise "gratifying" has been the cooperation of the short lines which "are using their own methods to comply." This, said the ODT's May 2 statement on the matter, was revealed "in a check-up on more than two-score companies which operate from two miles to 26 miles of track."

"These small railroads, many of which own no cars at all," the statement went on, "were among the first to provide the ODT with a full report on their less-than-carload service, and their ability to meet General Order No. 1's six-ton minimum weight limit after May 1 for this kind of freight. The order provided exceptions which would relieve the small roads of the weight limits when operating or other conditions made compliance difficult or impossible without imposing a hardship on patrons and shippers. Rather than take advantage of the exceptions, however, a number of the lines either put into service obsolete cars not permitted in interchange—sometimes borrowing this equipment from connecting roads—or cut down the daily service to two or three days a week."

Land Grant Repeal Met Tough House

(*Continued from page 913*)

had from the Bureau of the Budget advices to the effect that a repealer "without provision for reciprocal action by the railroads concerned would not be in accord with the program of the President." The Department of Agriculture did not appear at the committee hearings on the Lea bill. The only opposition there came from the War Department which did not want its freight charges increased; and from two government land-grant-rate clerks who appeared only for themselves. Meanwhile, the bill got not only railroad and shipper support, but it was favored also by the Interstate Commerce Commission, the Office of Defense Transportation, the Office of Price Administration, the American Trucking Associations, Inc., the Chamber of Commerce of the United States, and representatives of railroad labor.

The amendment proposed by the Department of Agriculture contained not only the return-the-lands provision, but it also undertook to set out a formula whereby local communities would be reimbursed by the federal government for any loss of taxes on the lands returned. When that amendment, proposed by Representative Colmer, Democrat of Mississippi, was rejected, Representative Dworshak, Republican of Idaho, proposed another which had only the return-the-lands provision. That, too, was rejected, as was a third proposed by Representative Sauthoff, Progressive of Wisconsin, to limit the application of the repealer to the period of "the present war emergency and six months thereafter." The successful motion to recommit was made by Representative Dirksen, Republican of Illinois.

During the debate on the bill and amendments, the burden of the proponents' fight was carried by Chairman Lea, Representative Halleck, Republican of Indiana, and Representative Hinshaw, Republican of California. Other favorable speeches came from Representatives Wadsworth of New York and Van Zandt of Pennsylvania. Speakers in opposition included Representatives Cochran, Democrat of Missouri; South, Democrat of Texas; Poage, Democrat of Texas; Hobbs, Democrat of Ala-

bama; Leavy, Democrat of Washington; Pierce, Democrat of Oregon, and Hull, "Progressive" of Wisconsin.

As noted at the outset, opposition speakers had much to say about the additional cost to the government, some predicting that the figure would be $150,000,000 a year when war traffic reached its peak. Also, there was talk of the "valuable" lands retained by the railroads, with mention of mineral deposits and timber found on such lands. And, finally, current railroad earnings were cited to show that the carriers were not now in need. Representative Hobbs, for example, said it seemed to him "that proof is not made in the hearings that the railroads are hauling Army or Navy freight or passengers at a loss."

In the face of all this the proponents' arguments from the standpoint of the equities of the situation went unheeded. The vote to recommit came after Chairman Lea had made a final plea as follows: "I hope the time will never come when the House, calmly considering a proposed piece of legislation, will refuse to do the right thing simply because it costs something. It is convenient to be economical, it is a duty to be just. The committee approached this question from the standpoint of doing what we believed to be right."

Reed Plans to Push Bill to Give I. C. C. Revenue-Pooling Power

Preparing for forthcoming hearings on his bill (S.2163) to give the Interstate Commerce Commission authority to require the pooling of revenues derived from general rate increases, Senator Clyde Reed, Republican of Kansas, this week wrote letters on the matter to Justus F. Craemer, president of the California Railroad Commission, and John E. Benton, general solicitor of the National Association of Railroad and Utilities Commissioners. The Senator was prompted thus to seek the cooperation and participation in the hearings of state commissioners by a pronouncement supporting the idea behind the bill, which was embodied in a recent decision of the California commission and quoted in the latest issue of Mr. Benton's bulletin to the Association members.

While no date has been set for hearings on the bill, Senator Reed told Mr. Craemer that they would be scheduled as soon as the pressure of other matters let up sufficiently to permit him to give such hearings his personal attention. He told Mr. Benton that he was hopeful that this would be "in the not too distant future." The Senator indicated that he is also going to ask the National Industrial Traffic League and other shipper and traffic associations "to give us the benefit of their best judgment."

"This time," as Senator Reed put it in the letter to Mr. Benton, "no one is going to be permitted to brush aside this question on any grounds of 'vested rights' in either railroad or commercial property. This is a national question calling for a national solution. I am going to make an earnest effort to illuminate the whole question and possibly to crystallize the experience of many men into a solution."

Meanwhile, the Senator had told President Craemer of the California Commission of his long-held belief that "it is impossible to go on indefinitely allowing 'horizontal increases' in rates without regard to the situation of individual railroad companies to bring the weak lines up to a 'fair return' basis. By allowing 'horizontal increases' it would give the stronger railroads an unconscionable earning basis, and would impose an unjust burden upon the shippers. The question is what to do about it. This, in my opinion, is the most important question in the whole railroad situation."

The Senator then told how his bill "was written in the office of the Interstate Commerce Commission," and he pointed out that its provisions were in the Transportation Act of 1940 when that measure came from the Senate committee on interstate commerce as S.2009. They were removed by the Senate. The provisions of the bill were set out in the *Railway Age* of January 10, page 178.

At the forthcoming hearings, Senator Reed also told Mr. Craemer, all witnesses will be asked the following questions: (1) What is to be included in a "national transportation system" so far as railroads are concerned? (2) *Why* is a weak railroad? (3) Is it necessary or desirable in a national transportation system to preserve the weak railroads? (4) If question 3 is answered in the affirmative, how do you propose that it be done?

Forwarder Report Adopted by Senate

(*Continued from page 911*)

rather than a certificate of convenience and necessity. Any forwarder in business on the enactment date would be permitted to continue in operation without a permt for 180 days; and if application for a permit is made within that period, the operation could continue until otherwise ordered by the commission.

The commission is directed to issue a permit to any "qualified applicant," upon a finding that the proposed service will be "consistent with the public interest and the national transportation policy." And while no common carriers subject to Parts I, II, or III would be eligible for a permit, no application filed by a corporation controlled by such carrier "shall be denied because of the relationship between such corporation and such common carrier."

Rate provisions of the bill are like those of other parts of the act, requiring that forwarder rates be just, reasonable, nondiscriminatory, and non-prejudicial. Also, the commission would get substantially the same power over intra-state forwarder rates that it has over such rail rates. The rate-making rule requires the commission to give consideration to "the inherent nature of freight forwarding." There is, however, no long-and-short-haul clause; nor does the conference report contain the once-proposed special minimum-rate provision which would have prohibited publication by a forwarder of a rate "which is lower than the lowest rate published by any carrier or carriers subject to this act whose facilities are used. . . ."

Also out of the final version is the proposed exemption for forwarders of a "single general commodity"; but the conference report does embody something like a commodities clause. The latter has the general provision prohibiting a shipper from engaging in the freight forwarding business; but forwarder operations by a shipper-controlled company could be permitted by the I. C. C. if it finds that they would be consistent with the public interest. Moreover, shippers who were in the forwarding business on October 1, 1941, could continue therein pending determination of their applications for permits.

Other provisions of the bill include those giving the I. C. C. the same wartime emergency powers over forwarders that it has over railroads and motor carriers; and those which amend the motor carrier act to give terminal trucking operations of forwarders a status like that given such operations of railroads and line-haul motor carriers. The law would become effective on the enactment date, except that the section relating to tariffs of forwarders would become effective 60 days after enactment, and the sections relating to rates, bills of lading, collection of charges, and enforcement and procedure would become effective 90 days after enactment. The commission would have authority to postpone the effective date of any provision—but not beyond September 1, 1942.

Threat to Railroads Is Threat to War Program

Threatened impending shortages of materials, equipment and man power, which confront the railroad industry, is a threat to our war program, according to C. E. Johnson, associate director of the Division of Railway Transport of the Office of Defense Transportation, in an address before the Northwest Shippers Advisory Board at Fargo, N. D. on April 30. "We cannot permit that program to be endangered," he continued. "The railroads must be permitted to obtain, in sufficient quantities, materials required for their proper maintenance. They must be permitted to acquire the equipment which they need in order to provide a reasonable reserve and to insure the adequacy of their service. Finally, there must be available to them the competent force of workers which their satisfactory operation will require.

"We may take it for granted, I believe, that there will be a substantial reduction in various classes of normal civilian traffic, resulting from the application of the priority system and from the conversion of many factories from civilian to military production. We have already seen these factors at work in the reduction of automobile shipments, for example. Their influence will be felt with increasing effect in other industries as time goes on. But this does not mean that there will be a net reduction in the demand for railroad service. For at the same time, the needs of our war establishment will undoubtedly result in a very substantial increase in the movement of military goods and of the basic materials which enter into their construction. The ore movement this year, for instance, must surpass all previous records. Some years ago it was estimated that in the event an emergency centering

on the West Coast, the railroads would be called upon to deliver twelve million tons of supplies to our Pacific ports for naval vessels alone, and another twelve million tons for work at navy yards, an estimated requirement of 1,650 cars per day. This estimate now, undoubtedly, must be greatly increased. Similarly, a few months ago, the War Department announced that between October and January railroad shipments of Ordnance Department items had increased almost one thousand per cent. It was estimated that by the end of this year ordnance shipments would require at least 2,000 freight cars each day.

"In addition to the increased traffic which will result from our increased, though converted, national production, there are other factors which will serve to swell the demands for transportation service upon the railroads. The average haul of freight has increased, due both to changes in the composition of traffic and in its origins and destinations. Perhaps even more important will be the diversion of traffic to the railways from other forms of transportation. That diversion has already occurred in a substantial amount.

"The potentialities of increased demand for passenger transportation are staggering. The current annual report of the Interstate Commerce Commission estimates that in a recent year the railways handled less than 9 per cent of total passenger-miles while highway vehicles, including private automobiles, carried more than 90 per cent. A transfer of 10 per cent of this highway movement to the rails would thus mean an increase of 100 per cent in railroad passenger traffic.

"In what shape are the railroads to meet these demands? Their fixed properties, in the main, seem fully adequate. There is, in general, ample line-haul capacity between terminals. There is ample terminal capacity, provided always that freight is unloaded promptly on arrival. Yet it must be realized that these are abnormal times, times of great emergency, times when heavy demands may be made suddenly and without warning. The railroads will be subjected to all of the stresses and strains of war. Difficulties are inevitable; congestions or bottlenecks may appear; strive as we may, problems will arise. Many of these problems will be foreseen and prepared for; others will have to be solved as they arise."

Monthly Review by I.C.C. Bureau of Statistics

Reviewing railway earnings in the latest issue of its "Monthly Comment on Transportation Statistics," the Interstate Commerce Commission's Bureau of Statistics notes that for the 12 months ended March 31, 1942, the gross of the Class I roads totaled $5,678,292,865, an amount "greater than for any calendar year since 1929, when the total was $6,280,000,000." Freight revenue for the 12 months ended March 31 was only 2.4 per cent less than in 1929, but passenger and express revenues were down 35 per cent and 57.9 per cent, respectively.

Attention is called to the fact that the 29.8 revenue increase for March as compared with March, 1941, "was the result of widely differing rates of increase among the districts." The range was from 23.7 per cent in the Eastern to 42.2 per cent in the Western district. In the Great Lakes region the conversion of the automobile industry to war production "exerted an adverse effect on railways in that area." March revenues for the region were only 19.7 per cent above March, 1941, while the Grand Trunk Western experienced a decline of 15.7 per cent and the Pere Marquette reported a gain of only a fraction of one per cent. The Pocahontas region showed a gain in March of only 3.3 per cent over the corresponding period last year, "partly as a result of the abnormally large shipments of coal last year prior to the shutdown of the mines in April."

Later on in the statement, the Bureau points out that the total gain in net railway operating income for March as compared with March, 1941, is accounted for chiefly by the Western district. In connection with the increase in expenses for maintenance, it calls attention to the fact there has been since January 1 an extension of depreciation accounting for fixed improvements. "Total depreciation of way, structures, and equipment," the Bureau goes on, "was charged to the extent of $19,686,063 in March, 1942, an increase of 10.1 per cent over the like 1941 total. There was in addition a charge for the amortization of 'defense projects' (chiefly equipment) of $5,466,910. The two items together, or $25,152,973, amount to nearly seven per cent of the operating expenses."

On the subject of freight car utilization, the Bureau set up comparative averages of ton-miles, revenue and non-revenue, per serviceable freight car. That average for January, 1942, was 24,374 ton-miles, and for February it was 23,195 ton miles. The comparable figures for January and February, 1941, were 20,636 ton-miles and 19,507 ton-miles; and for January and February, 1929, they were 16,644 ton-miles and 16,209 ton-miles.

The statement gives 1941 operating revenues of Class I motor carriers of property as $620,426,000, an increase of 26.7 per cent above 1940's $489,850,000. The net operating revenues were up 39.8 per cent—from $21,921,000 to $30,635,000. Truck operating results for 1941's fourth quarter, however, "contrasted sharply" with these overall results for the year. An operating loss of $2,567,000 was incurred, the rise in operating expenses which offset the revenue increase being primarily attributable "to the striking rise in terminal expenses." The latter rose 38 per cent.

Data on service performed by intercity trucks show that such service as measured by truck-miles and tons of revenue freight hauled "showed a slackened rate of growth after the middle of 1941, with a marked slump in the rate for the fourth quarter." Common-carrier truck miles for 1941's second quarter were 27.8 per cent above the comparable 1940 period and the tons hauled were up 37.7 per cent. In the third quarter the increases were 23.5 per cent and 30.6 per cent, respectively; while in the fourth quarter they were 6.9 per cent and 12.7 per cent. For the last quarter of 1941, compared with the same quarter of 1940, railway l.c.l. tonnage increased 16.8 per cent, manufactured and miscellaneous products, 21 per cent, and manufactured and miscellaneous products, n.o.s., 33.3 per cent.

Air carrier statistics show that the passenger load factor (the percentage of available seats utilized) in February was 55.78, the highest for any February on record. One transcontinental air line had a February load factor of 64.78 per cent, while a Seattle-San Diego line had one of 79.89 per cent.

Defines ODT Role in Rubber Saving

(*Continued from page 912*)

in discharging such functions, conform to such policies, programs, and measures as the Director of the Office of Defense Transportation may prescribe in the execution of the powers vested in him by this order and by Executive Order 8989." The latter is the order of December 18, 1941, which created ODT.

ODT had already been doing a considerable amount of work on rubber conservation, and the principal effect of the new order will be to give it authority over private automobiles and duties to formulate programs for the conservation of rubber and for the adjustment of transport to the available supply. Following the issuance of the executive order came another from Director James S. Knowlson of WPB's Division of Industry Operations, instructing OPA to be guided by ODT on policy matters to the full extent of administrative practicability.

The ODT statement of May 5 told of Mr. Eastman's "confident hope" that owners of automobile vehicles, "acting in the spirit of patriotism, would voluntarily see to it that those vehicles were operated only for essential purposes, and that they would at once eliminate pleasure trips and all other unnecessary driving, even though some inconvenience was involved. The present supply of automotive vehicles and particularly rubber tires," the ODT director said, "constitutes a national and not a private resource. The rubber shortage is a grave reality. Rubber must be conserved. Every owner of a motor vehicle in public or private service should realize that he holds this vehicle in trust for the national war effort and that it should be used only for purposes of necessity."

A few days earlier OPA had announced arrangements with ODT for "a series of meetings in principal cities throughout the United States to explain the seriousness of the rubber situation to shippers, truckers, tire dealers and the general public." Washington officials of both organizations, as well as local civic leaders and tire industry and transportation men, will address invited audiences in 13 cities. The first meeting will be held in Boston, Mass., on May 11, and others will follow at short intervals between then and June 3.

ODT's representative in the touring group will be John L. Rogers, director of the Division of Motor Transport; his subject will be "America's Trucks and Buses —Keep 'em Rolling." Charles F. Phillips, acting chief of OPA's Tire Rationing Di-

vision, will discuss "The Battle of Rubber." Other speakers will include Ted V. Rodgers, president of American Trucking Associations, Inc., who will talk on "Winning the War on Wheels"; and representatives of War Department's Highway Traffic Advisory Committee, the Department of Agriculture, and the private truckers.

The meetings, in addition to the opening session at Boston on May 11, are scheduled to be held in New York, May 12; Philadelphia, Pa., May 13; Atlanta, Ga., May 15; Cincinnati, Ohio, May 18; Chicago, May 19; Kansas City, Mo., May 20; Dallas, Texas, May 22; Denver, Colo., May 25; Salt Lake City, Utah, May 27; Seattle, Wash., May 29; San Francisco, Calif., June 1; and Los Angeles, June 3.

Eastman Flays Trade Barriers

(*Continued from page 909*)

powerful politically, have been extremely active in seeking state restrictions upon the size and weight of motor vehicles for this purpose, and in opposing any federal remedial legislation. Manifestly also, the success of such efforts on their part in even a single state has effects in interfering with the flow of interstate commerce by motor vehicle which extend far beyond the boundaries of that state. Continuing with this frank expression of personal opinion, there exist, in a very few states, regulations which can be satisfactorily explained in no other way."

In this regard Mr. Eastman declared "that to the extent that the desire to protect the railroads from competition may be responsible for some of these restrictions, the railroads certainly are in need of no such protection now. On the contrary, they need, or soon will need, all the help from competing agencies of transportation that they can get."

The ODT Director also told the meeting that there are two ways of accomplishing for the duration of the war the needed relaxation of state laws which impede the free flow of traffic. One is by voluntary action on the part of the states, and the other is for the federal government to step in and override the state laws. Mr. Eastman feels that the first method should be given a trial before the second is resorted to.

Asked a question from the floor as to why his office had not taken action regarding the sizes and weights restrictions on motor trucks in various states, Mr. Eastman said that he had hesitated to ask for such power in view of the outcry from state officials regarding the recent report and recommendations wherein the Interstate Commerce Commission sought power to set aside state laws fixing sizes and weights of motor vehicles. He also admitted that he did not have the power to override the states in his executive order creating the ODT.

Thomas H. MacDonald, commissioner of the Public Roads Administration, addressed the meeting briefly on the recommended policy on sizes and weights to permit the free movement of motor vehicles between the states. He outlined recommended specifications for trucks and buses which, he said, had been agreed upon by various associations of state officials in different parts of the country.

Equipment and Supplies

Equipment Orders Dwindle

New freight car buying virtually ceases; locomotive situation somewhat easier

Railway equipment purchases for domestic service reported in the *Railway Age* during April comprised 29 locomotives (17 steam and 12 Diesel-electric) and 2,315 freight cars (chiefly 2,000 ore cars ordered by the Duluth, Missabe & Iron Range).

Domestic equipment orders placed during the first four months of 1942, exclusive of U. S. Government orders, totaled 364 locomotives (219 steam, 140 Diesel-electric and 5 electric) and 24,420 freight cars. Of the 24,420 freight cars, 23,978 were ordered by railroads and 442 by industrial companies. Railroad orders were divided 3,973 to company shops and 20,005 to contract car builders. Certain of the orders included in these totals are at present suspended pending approval of the War Production Board.

Orders for additional locomotives continue to be negotiated and placed. Although a considerable number of Diesel engines and more than 50 steam engines, in addition to those set forth in the accompanying table, were reported purchased during the latter part of April, the railroads involved have not confirmed receipt of government approval and these purchases, consequently, have not been listed.

With all equipment orders now subject to WPB approval, public inquiries for new freight cars have virtually ceased. Unfilled when the April 4 limitation order froze further deliveries were inquiries, reported in the *Railway Age* prior thereto, totaling about 9,000 cars for domestic service.

As a result of the government's action, parts suppliers are receiving numerous cancellations by railroads and car builders of previously-ordered equipment, and, in some instances, have been requested to re-purchase supplies.

Deliveries by contract car builders during April totaled 7,261 cars for domestic service (7,046 to railroads, 192 to the army and navy and 23 to private car lines and industrial companies) and 684 for export (510 lend-lease and 174 other). This compares with 7,745 cars delivered for domestic service in the preceding month of March and brings the number delivered by contract car builders during the first four months of 1942 to 28,880 which, added to estimated deliveries by railroad company shops of 6,000 cars, raises total production for domestic service thus far this year to about 34,880 cars.

LOCOMOTIVES

THE WESTERN PACIFIC inquiry for steam locomotive power comprises six engines of 4-8-4 wheel arrangement and six 2-8-2 wheel arrangement. The inquiry for the six 4-8-4 type locomotives was originally reported in the *Railway Age* of April 4.

SIGNALING

THE BOARD OF TRANSPORTATION OF THE CITY OF NEW YORK has placed an order

Domestic Equipment Orders Reported in Issues of the Railway Age in April 1942 (Including May 2)

Date	*Name of Company*	*No.*	*Type*	*Builder*
			LOCOMOTIVES	
Apr. 11	Alabama, Tennessee & Northern	1	Diesel-electric Sw.	General Electric Co.
Apr. 11	Southern	1	Diesel-electric Pass.	American Locomotive Co.
		1	Diesel-electric Pass.	Electro-Motive Corp.
Apr. 11	Duluth, Missabe & Iron Range	10	2-8-8-4	Baldwin Locomotive Works
Apr. 18	Laurinburg & Southern	1	Diesel-electric Sw.	General Electric Co.
Apr. 18	Bessemer & Lake Erie	5	2-10-4	Baldwin Locomotive Works
		2	0-8-0	American Locomotive Co.
Apr. 25	Patapsco & Back Rivers	4	Diesel-electric Sw.	Baldwin Locomotive Works
Apr. 25	Philadelphia, Bethlehem & New England	4	Diesel-electric Sw.	Electro-Motive Corp.
			FREIGHT CARS	
Apr. 11	Duluth, Missabe & Iron Range	500	Ore	American Car & Foundry
		500	Ore	General American
		500	Ore	Pullman-Standard
		500	Ore	Pressed Steel Car
Apr. 11	Pittsburg & Shawmut	100	Hopper	Pressed Steel Car
Apr. 18	Baltimore & Ohio	25	Hopper	Bethlehem Steel Co.
May 2	Phelps Dodge Corp.	190	Ore	Austin-Western

No Passenger-Train Cars Ordered in April, 1942

with the General Railway Signal Company covering a-c. block signaling and electric interlocking materials for the Fulton Street Line extension of the New York City Transit System from Utica avenue to Pennsylvania avenue. The order includes a Model-5E electric interlocking machine having 44 working levers and 8 spare spaces, an illuminated track diagram, 24 Model-5 switch machines, 81 mechanical trip train stops, Type-AT color-light signals, prewired relay cases and junction boxes, transformers, rectifiers, a-c. relays, and rail bonds.

THE ELECTRO-MOTIVE CORPORATION has placed orders with the General Railway Signal Company covering four sets of intermittent inductive auto-manual train control engine equipments for Baltimore & Ohio locomotives.

THE MISSOURI PACIFIC has placed an order with the General Railway Signal Company covering materials for centralized traffic control and block signaling from Van Buren, Ark., to Barling. Centralized traffic control extends from Van Buren to Fort Smith Junction, comprising 10.6 miles of single track, controlled from Greenwood Junction, Okla. Block signaling, without C. T. C., extends 13 miles further, from Fort Smith Junction to Barling. The order includes, besides the control machine and coding equipment, 4 Model-5D dual-control switch machines, 20 Type-G, 30 Type-D, and 4 Type-L color light signals, 40 prewired cases and 5 prewired welded steel instrument housings, and a quantity of Type-K relays, rectifiers and transformers.

Proper Storage of Trucks

Motor trucks taken out of service in accordance with the war conservation program as well as new trucks not yet allocated should be stored "with the utmost care," said Director Eastman of the Office of Defense Transportation in a statement issued last week. The statement recommended 11 specific procedures, covering among other things measures designed to protect various parts of the truck, the engine and the tires.

Order Facilitates Exchange of Car Materials Inventories

"In order to make full use of existing inventories in the hands of all freight car makers before permitting them to receive additional raw materials," the War Production Board has issued an order canceling all preference ratings of A-2 or lower on material for car construction which has not already been received by or placed in transit to the producers.

At the same time, the order, Supplementary General Limitation Order No. L-97-a-1, effective April 29, permits any producer to sell and deliver any material which he has on hand or in transit to any other producer of freight cars. "This will permit balancing of inventories between producers by sale or exchange, and will assure maximum utilization of all supplies now on hand," said the WPB announcement.

It was explained that the supplementary order was issued because some producers now have larger inventories of certain types of material than they will be allowed to use under this year's freight car building program as authorized by the Requirements Committee of WPB. The WPB has approved the construction of only 18,000 freight cars this year, over and above the 45,000 cars contemplated in the previous authorization by the former Supply Priorities and Allocation Board program announced last fall.

The number of cars to be built by each producer is being scheduled by the Transportation Branch of the WPB, and the order will allow producers to transfer to other manufacturers materials in their inventories which are in excess of the amount required for the number of cars they will be permitted to build.

Amendment No. 1 to General Limitation Order No. L-97, also announced, excludes mining locomotives from the provisions of that order. This action was taken because priorities for mining locomotives are controlled under the terms of the Mining Machinery Order, P-56. The manufacture and distribution of such locomotives are controlled by the preference rating orders administered by the Mining Branch of the WPB.

ODT Warning on Illegal Conversion of New Trucks to Use

Motor truck dealers were warned last week by the Office of Defense Transportation that anyone converting to use any new commercial vehicle covered by General Conservation Order M-100 without legal possession of the vehicle as provided by the order is liable to prosecution under the recently-enacted war powers law. The warning, said the ODT statement, was issued "because of recurrent rumors that new motor trucks are being illegally acquired by truckers in violation of the truck rationing procedure."

Priorities and Prices

Following are references to orders of interest to railroads, issued by the War Production Board and the Office of Price Administration since April 25.

Auto tires—Amendment No. 7 to Limitation Order L-1-a, effective April 25, rescinds the prohibition against putting tires and tubes on new heavy trucks except for delivery to dealers. Approximately 5,000 heavy trucks can be equipped with tires and tubes under the amended order. Only trucks having a gross vehicle weight of 16,000 lb. or more are eligible to receive tires and tubes under the amendment.

Freight car materials—Supplementary General Limitation Order L-97-a-1, effective April 30, permits producers of freight cars to deliver any material on hand to other producers of freight cars. The number of cars to be built by each producer is being scheduled by the Transportation Branch of WPB, and the order will allow producers to transfer to other manufacturers materials in their inventories which are in excess of the amount required for the number of cars they will be permitted to build. At the same time the order cancels all preference ratings of A-2 or lower on undelivered material for car construction.

Machine tools—Limitation Order L-108, effective April 27, provides that only one coat of primer or sealer may be applied to new metal-working equipment. No filler may be applied and not more than two coats of paint, enamel or lacquer may be used. Any color other than old machine-tool gray for the final coat of paint is prohibited.

Prices

General—Maximum Price Regulation Order, issued April 28, following President Roosevelt's demand for action to halt mounting costs of living, set the highest prices charged in March as an absolute ceiling over all commodities except a limited list of food commodities and services. Beginning May 18, retail prices, with a few exceptions, must not exceed the highest levels charged during March; manufacturer and wholesale prices and the prices for wholesale and industrial services must not exceed the highest March levels; no one may charge more for services sold at retail in connection with a commodity than was charged in March and all retailers, wholesalers, manufacturers and sellers of services must preserve existing records of sales made during March for maximum pricing purposes when the ceiling goes into effect. All existing OPA schedules and regulations issued over the previous year continue in force. Commodities covered by temporary 60 day regulations will come within the provisions upon their expiration unless otherwise treated by separate orders. Commodities not covered by the regulation include common carrier and public utility rates and primary raw materials, such as timber and mineral ores, which are controlled by ceilings already in effect.

Bituminous coal—Maximum Price Regulation No. 120, effective May 18, establishes maximum prices for bituminous coal sold at mines or preparation plants at levels somewhat higher than prevailed during the October 1-15, 1941 period. The order provides that on and after May 18, regardless of the terms of any contract, agreement, lease or other obligation, no producer or distributor may sell bituminous coal for delivery from a mine or a preparation plant and no person may receive bituminous coal delivered by a producer or distributor at prices higher than the prices prescribed in the order. Lower prices may be charged, except that producers and distributors may not charge lower prices than the effective minimums set from time to time by the Bituminous Coal Division. All classifications, price groups, size groups, since index numbers, subdistricts, seams, market areas and other terms are those established by the Coal Division. Mixtures of two or more sizes must be sold at not more than the weighted average of maximum prices for each size on a per net ton basis. Charges made for special services shall not exceed the charges during the October 1-15, 1941, period.

Construction equipment—Maximum Price Regulation No. 134, effective May 11, prohibits rentals on any construction or road maintenance equipment at prices or rates in excess of prescribed schedules which give the rental prices payable monthly, weekly and daily for different sizes of air compressors, air tools, drill steels, batchers, boilers, buckets, bulldozers, cages, cars, carts, chutes, column clamps, converters, cranes, crushers, derricks, hoists, generators, graders, machines, hammers, jacks, mixers, pumps, scrapers, shovels, spreaders, tractors, wagons, welding machines and wheelbarrows.

Fuel oil—Maximum Price Regulation No. 122, issued April 30, formalized the maximum prices which may be charged by wholesalers and retailers of solid fuels at the highest levels prevailing in the December 15-31 period. Previously, informal agreements had held prices at this level. The regulation will become effective May 18, the effective date of the General Maximum Price Regulation, and will cover all sales of solid fuels in any quantity excepting sales of coal at mines or preparation plants which are covered in other regulations. Revised Price Schedule No. 88, as interpreted April 27, entitles buyers to the same cash discounts that they received on comparable purchases from the same sellers on October 15, 1941.

Gasoline—Maximum Price Regulation No. 137, effective May 18, places ceilings on motor fuel prices at all service stations throughout the country, with the exception of 17 East Coast states and the District of Columbia, at the highest prices charged during March. In the East Coast area, service stations are allowed to charge the highest prices prevailing during March plus 0.4-cent a gal. for gasoline and 0.2-cent a gal. for diesel fuel to adjust for changes in transportation charges.

Iron and steel—Amendment No. 4 to Revised Price Schedule No. 6, issued April 27, authorizes

increases in the delivered prices of iron and steel products at Toledo, Ohio, Detroit and Eastern Michigan and at Gulf Coast basing points. The practice, prior to Price Schedule No. 6, was to quote delivered prices which were less than the price at the nearest governing basing point, plus transportation charges. The increase of 6 per cent in railroad rates, effective March 18, on iron and steel products was in general permitted to be passed on to the consumer by Schedule No. 6 except in the case of shipments to these territories. A variance between the increases in the delivered price of 25 cents a gross ton and 2 cents a cwt. was made to adjust for differences in freight rates on semi-finished and finished products.

Supply Trade

E. W. Jackson, general service manager of the **Caterpillar Tractor Company,** Peoria, Ill., has been promoted to assistant to the president.

E. Kuehn, factory manager of the **Electro-Motive Division of General Motors Corporation,** has been appointed special representative in the railroad transportation field.

E. R. Breech has been elected president of the **Bendix-Westinghouse Automotive Air Brake Company** to succeed Vincent Bendix, who resigned. Mr. Breech is also president of the Bendix Aviation Corporation.

E. A. Preston, mechanical engineer of the D. J. Murray Manufacturing Company, Wausau, Wis., has been appointed mechanical engineer of the **Wilson Engineering Corporation,** Chicago, succeeding **J. M. Lammedee,** deceased.

D. S. Hoffman, assistant vice-president of the Peerless Equipment Company, Chicago, and **Thomas R. Wagner,** formerly assistant district manager of the Sinclair Refining Company, have been elected vice-presidents of the **Peerless Equipment Co.**

W. R. Kuhn has been appointed district manager, Cleveland, Ohio, office of the **Allegheny Ludlum Steel Corporation.** Since his graduation from Yale University in 1914, Mr. Kuhn's entire business association has been with Allegheny Ludlum or its underlying companies. Prior to his new appointment, he was assistant district manager at Cleveland.

Victor E. Rennix, until recently associated with the Chicago office of the **Baldwin Locomotive Works,** is now serving in the motive power section of the transportation equipment branch of the War Production Board at Washington, D. C. When his service there is ended, Mr. Rennix is expected to resume his former duties with the Baldwin Locomotive Works.

Frank U. Hayes has been appointed assistant sales manager of the **Bullard Company** at Bridgeport, Conn. Mr. Hayes, who becomes assistant to E. Payson Blanchard, sales manager, joined the Bullard Company in 1935 and was appointed sales representative in the middle Atlantic territory in September, 1936. In 1941, he became a technical advisor in the tool section of the production division of the OPM and, upon his return to the Bullard Company, established the firm's sub-contracting division.

Fred Kaiser, for the past three and one-half years branch manager at Detroit, Mich., for the **Minneapolis-Honeywell Regulator Company,** has been appointed Chicago branch manager to replace **Charles L. Saunders,** who recently resigned to join the War Production Board at Washington, D. C., as chief of the instrument section in the machinery division. **D. J. Peterson,** branch manager at Buffalo, N. Y., will succeed Mr. Kaiser at Detroit, and **Herman Seelbach, Jr.,** who has been attached to the air conditioning division at Buffalo, will succeed Mr. Peterson in that city.

F. H. Janke, treasurer of the **American Brake Shoe & Foundry Co.,** has been elected assistant to the president. **Kempton Dunn** will succeed Mr. Janke as treasurer of the company. Mr. Janke has been associated with the Brake Shoe Company since its organization in 1902. He has been an officer for nearly 40 years and has served as treasurer since March, 1935. In assuming his new office, he will continue many of his former duties, particularly in the fields of contact and credit. Mr. Dunn was graduated from Yale University in 1931 and joined the Brake Shoe Company in January, 1932. He was elected assistant treasurer in 1934.

OBITUARY

Morris S. Towson, president and general manager of the Elwell-Parker Electric Company of Cleveland, Ohio, died in Orlando, Fla., on March 17. He was 76 years of age. Born in Cleveland, Mr. Towson was graduated from the Case School of Applied Science in 1886 and for several years was associated with the Brown Hoisting Machinery Company there. In 1893, a separate company was organized to build the Elwell-Parker motor under British license, and Mr. Towson was placed in charge. He developed and patented many practical basic features which were incorporated in power industrial trucks.

J. C. Barr, district sales agent in New England for the Rail Joint Company, with headquarters at Boston, Mass., died on April 28 at Palm Beach, Fla. Mr. Barr entered the service of the Weber Rail Joint Manufacturing Company in 1899 as representative in charge of the Boston office, covering the New England territory. About three years later he was appointed general sales agent of the same company with headquarters in New York. In 1905, the Weber Rail Joint Manufacturing Company was consolidated with other concerns to form the Rail Joint Company, and since that time Mr. Barr had served as district sales agent for the latter company at Boston.

Financial

ALMANOR.—*Control by the Grande Ronde Pine Company.*—The Grande Ronde Pine Company has been authorized by Division 4 of the Interstate Commerce Commission to acquire control of this company through ownership of its capital stock.

CENTRAL OF GEORGIA.—*Bond Maturity.*—Holders of $4,840,000 of bonds secured by the collateral trust mortgage of the Central Railway & Banking Co. of Georgia have received notice that interest due on May 1 will be paid at the Central Hanover Bank & Trust Co., New York, but that no method of paying the principal, also due May 1, has been devised. Discussions are under way with bondholders and the mortgage trustee and it is hoped that a solution respecting the maturity of these bonds will be reached shortly.

CENTRAL OF GEORGIA.—*Corporate President Elected.*—Thomas M. Cunningham, general counsel for the trustee of the Central of Georgia and vice-president and general counsel of the corporation, was elected president of the corporation on April 14, succeeding Henry D. Pollard, whose death on January 7 was reported in the *Railway Age* of January 10. W. McN. Knapp, chief traffic officer, and H. L. Fulton, comptroller of the Central of Georgia, were elected new members of the board of directors on the same date. Mr. Cunningham will continue to serve as general counsel for the trustee, M. P. Callaway, who is responsible for the operation of the road.

CUYAHOGA VALLEY.—*Change of Control.*—The Jones & Laughlin Steel Corporation has applied to the Interstate Commerce Commission for authority to acquire the stock of this road, which has been controlled by the Otis Steel Company, now being merged into Jones & Laughlin.

ERIE.—*Acquisition of Control.*—This road has applied to the Interstate Commerce Commission for authority to acquire control of the Patterson & Hudson River, which it operates under lease. The application pointed out that the P. & H. R. has 12,600 shares of stock outstanding, of which the Southern Tier Development Company, an Erie subsidiary, owns 6,295 shares; and the Erie now proposes to buy 300 more shares.

ERIE & MICHIGAN RAILWAY & NAVIGATION.—*Stock.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to issue $92,705 of common capital stock, consisting of 9,270½ shares of a par value of $10 each, in exchange for an equal amount of existing common stock, consisting of 927.05 shares of a par value of $100 each, on the basis of 10 shares of the new stock for one share of the existing stock.

ERIE.—*Abandonment.*—This company would be denied authority to abandon (1) a line of railroad extending northwesterly from Painted Post, N. Y., to Avon, 73 miles; and (2) a branch line extending southwesterly from a connection with the above-mentioned line at Conesus Lake Junc-

tion, N. Y., to Lakeville, 1.5 miles, if Division 4 of the Interstate Commerce Commission adopts a proposed report of its Examiner J. S. Prichard. The examiner found that the line is operated "at a substantial gain" and that the facts of the record do not support the conclusion that the continued operation of the line would impose an undue burden on the company or upon interstate commerce.

MIDLAND VALLEY.—*Bonds.*—Division 4 of the Interstate Commerce Commission has vacated its order in Finance Docket No. 12367, authorizing this company to extend from April 1, 1953, to April 1, 1963, the date of maturity of $1,552,500 of adjustment mortgage five per cent 40-year gold bonds, series A, and $879,000 of adjustment mortgage five per cent 40-year gold bonds, series B. The action was taken after the company had advised the commission that the proposals set forth in the application were not consummated and the plan had been abandoned.

MISSOURI PACIFIC.—*Equipment Trust Certificates.*—Because of a shortage of equipment due to the war needs, this company has asked the Interstate Commerce Commission for permission to substitute in Finance Docket No. 13481 100 50-ton, 50-ft. all steel flat cars and 238 50-ton, 40-ft. 6 in. all-steel box cars for 50 covered cement hopper cars and 200 automobile cars. The estimated cost of the new equipment is $1,053,909 as contrasted with $981,167 for the equipment which the company is unable to obtain.

NEVADA COPPER BELT.—*Abandonment.*—This company has sought authority from the Interstate Commerce Commission to abandon a line extending from Hudson, Nev., to Ludwig, nine miles, and a branch line extending from Wabuska, Nev., to Thompson, 2.5 miles.

NEW YORK CENTRAL.—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon a branch line extending from Poland, N. Y., to Prospect Junction, 8.5 miles.

NEW YORK CENTRAL.—*Bank Loans Paid.*—The company repaid on April 30 all its $16,000,000 of bank loans outstanding, one-half of which was due at that time, bringing to $25,000,000 the amount of outstanding obligations repaid since January 1, including 4 per cent debentures due on that date.

NORFOLK SOUTHERN.—*Annual Report.*—The 1941 annual report of this road shows net deficit of $211,750 after interest and other charges, a decrease of $253,796 as compared with net deficit in 1940. Selected items from the income account follow:

	1941	Increase or Decrease Compared with 1940
Average Mileage Operated	733.17	−53.74
RAILWAY OPERATING REVENUES	$5,640,838	+$1,081,591
Maintenance of way	932,246	+91,092
Maintenance of equipment	707,438	+73,334
Transportation	1,957,964	+298,614
TOTAL OPERATING EXPENSES	4,137,479	+448,656
Operating ratio	73.35	−7.56
NET REVENUE FROM OPERATIONS	1,503,360	+632,935
Railway tax accruals	384,248	−13,269
Railway operating income	1,119,111	+646,204
Equipment rents —Net Dr.	264,121	+47,377
Joint facility rents —Net Dr.	5,673	−2,885
NET RAILWAY OPERATING INCOME	849,317	+601,713
Other income	188,178	+2,287
GROSS INCOME	1,037,496	+603,999
Rent for leased roads	24,427	−40,573
Interest on funded debt	826,886	+17,913
TOTAL DEDUCTIONS FROM GROSS INCOME	1,249,246	+350,204
NET DEFICIT	$211,750	−$253,796

NORFOLK & WESTERN.—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon a part of its Catawba branch extending from Hanging Rock, Va., to the end of the branch at Catawba Sanatorium Station, five miles.

NORTHERN PACIFIC.—*Annual Report.*—The 1941 annual report of this company shows net income after interest and other charges of $7,757,019, an increase of $5,692,927 as compared with net income in 1940. Selected items from the income account follow:

	1941	Increase or Decrease Compared with 1940
Average Mileage Operated	6,759.85	+40.33
RAILWAY OPERATING REVENUES	$85,346,327	+$16,631,692
TOTAL OPERATING EXPENSES	59,909,720	+8,294,456
Operating ratio	70.20	−4.92
NET REVENUE FROM OPERATIONS	25,436,607	+8,337,236
Railway tax accruals*	9,267,692	+2,232,070
Railway operating income	16,168,915	+6,105,166
Equipment rents —Net Cr.	1,594,622	+555,992
Joint facility rents —Net Cr.	2,159,242	−321,456
NET RAILWAY OPERATING INCOME	19,922,778	+6,339,703
Other income	2,746,272	−1,065,176
GROSS INCOME	22,669,051	+5,274,526
Rent for leased roads and equipment	53,095	+1,723
Interest on funded debt	14,414,067	−8,768
TOTAL FIXED CHARGES	14,574,288	−526,014
NET INCOME	$7,757,019	+5,692,927

* The year 1941 includes $1,679,502 dividend income, and $63,835 income from funded securities received from affiliated companies.

PERE MARQUETTE.—*Four new directors elected.*—Four new directors were elected and ten were re-elected at the annual meeting of the Pere Marquette at Detroit, Mich., on May 5. The new members of the board are Harvey D. Gibson, president of the Manufacturers Trust Company, New York; Carl O. Hoffman, New York attorney; James G. Blaine, president of the Marine Midland Trust Company of New York, and James M. Nicely, vice-president of the Guaranty Trust Company of New York. The directors which were re-elected are: George D. Brooke, Walter W. Colpitts, James E. Davidson, Howell B. Erminger, Jr., Allen P. Kirby, Walter S. McLucas, Ross S. Marshall, Otto Miller, Robert R. Young and Frank B. Bernard.

PITTSBURGH & LAKE ERIE.—*Annual Report.*—The 1941 annual report of this road shows net income of $6,147,703 after interest and other charges, an increase of $1,070,422 as compared with net income in 1940. Selected items from the income account follow:

	1941	Increase or Decrease Compared with 1940
Average Mileage Operated	232.07	−0.44
RAILWAY OPERATING REVENUES	$30,044,031	+$6,096,993
TOTAL OPERATING EXPENSES	21,859,604	+3,627,989
Operating ratio	72.76	−3.37
NET REVENUE FROM OPERATIONS	8,184,426	+2,469,003
Railway tax accruals	5,318,208	+2,233,218
Railway operating income	2,866,219	+235,785
Equipment rents —Net Cr.	4,553,393	+1,635,008
Joint facility rents —Net Cr.	71,402	+28,696
NET RAILWAY OPERATING INCOME	7,491,014	+1,899,489
Other income	471,012	+63,661
TOTAL INCOME	7,962,026	+1,963,150
Rent for leased roads and equipment	40,521	−39
TOTAL FIXED CHARGES	77,563	+34,740
NET INCOME	$6,147,703	+1,070,422

RICHMOND, FREDERICKSBURG & POTOMAC.—*Annual Report.*—The 1941 annual report of this road shows net income of $2,536,361 after interest and other charges, an increase of $1,560,581 as compared with net income in 1940. Selected items from the income statement follow:

	1941	Increase or Decrease Compared with 1940
RAILWAY OPERATING REVENUES	$14,039,903	+$4,361,552
TOTAL OPERATING EXPENSES	8,419,598	+1,428,572
NET REVENUE FROM OPERATIONS	5,620,305	+2,932,980
Railway tax accruals	2,190,909	+1,338,265
Railway operating income	3,429,396	+1,594,715
Hire of equipment rents—Dr.	747,379	+132,995
Joint facility rents —Dr.	63,993	−80,316
NET RAILWAY OPERATING INCOME	2,618,024	+1,542,036
Other income	249,789	+26,381
GROSS INCOME	2,867,813	+1,568,417
*Interest on funded debt	317,500	+1,414
TOTAL DEDUCTIONS FROM GROSS INCOME	331,452	+7,836
NET INCOME	$2,536,361	+$1,560,581

* Includes interest on 6% and 7% Guaranteed Stock.

ST. LOUIS-SAN FRANCISCO.—*Annual Report.*—The 1941 annual report of this company shows net deficit, after interest and other charges, of $223,663, a decrease of $7,040,846 as compared with net deficit of

$7,264,510 in 1940. Selected items from the income account follow:

	1941	Increase or Decrease Compared with 1940
Railway Operating Revenues	$61,835,203	+$13,654,232
Maintenance of way	7,490,701	+857,473
Maintenance of equipment	8,910,861	+1,427,160
Transportation	21,923,157	+3,591,062
Total Operating Expenses	45,216,544	+6,076,062
Net Revenue from Operations	16,618,660	+7,578,170
Railway tax accruals	4,278,045	+358,981
Hire of equipment—Net	180,815	+204,372
Joint facility rents—Net	223,775	−3,547
Net Railway Operating Income	12,297,655	+7,018,364
Other income	253,276	+80,239
Gross Income	12,550,931	+7,098,603
Total Deductions from Income	93,564	+2,845
Balance available for interest	12,457,367	+7,095,758
Interest on fixed charge obligations	12,681,030	+54,912
Balance	$223,663	−$7,040,846

Seaboard Air Line.—*Annual Report.*—The 1941 annual report of this road shows net income of $1,181,070 after interest and other charges, an increase of $6,154,418 as compared with net deficit of $4,973,349 in 1940. Selected items from the income account follow:

	1941	Increase or Decrease Compared with 1940
Railway Operating Revenues	$64,608,903	+$16,117,938
Total Operating Expenses	48,800,722	+9,529,958
Net Revenue from Operations	15,808,181	+6,587,980
Railway tax accruals	3,862,311	+385,364
Railway operating income	11,945,870	+6,202,616
Equipment rents—Dr.	1,670,608	+495,732
Joint facility rents—Dr.	168,298	+4,253
Net Railway Operating Income	10,106,964	+5,702,631
Other income	504,395	+187,248
Gross Income	10,611,359	+5,889,879
Rent and other charges	607,087	−2,267
Fixed interest charges	8,823,203	−262,272
Net Income	$1,181,070	+$6,154,418

Southern Pacific.—*Abandonment by the Visalia Electric.*—The Visalia Electric has been authorized by Division 4 of the Interstate Commerce Commission to abandon that portion of its line extending in a southerly and westerly direction from El Mirador, Calif., to the end of the line at Strathmore, 4.1 miles.

Wabash.—*Control and Securities.*—In completing the reorganization of this company Division 4 of the Interstate Commerce Commission has formally authorized the Pennsylvania to acquire control of it through ownership of its capital stock, and indirect control thereby of certain subsidiary railroad companies. At the same time the reorganized Wabash was granted authority to issue various securities to carry out the reorganization plan, a list of which were set out in the *Railway Age* of August 9, 1941, page 235. Commissioner Mahaffie dissented for the reasons stated in his dissent in the commission's previous decision, noted above, taking the position that the new financial structure of the company is "unsound."

Sylvania Central.—*Elected President and General Manager.*—Robert R. Cummins, general manager of the Central of Georgia, has been elected also president and general manager of the Sylvania Central Railway Company (owner of the property leased to the Sylvania Railway Company).

Western Fruit Express Company.—*Bank Loan.*—Arrangements have been made to borrow $1,500,000 to finance construction of 400 refrigerator cars at estimated cost of $1,695,000. Loan will be payable in 12 semi-annual installments, beginning October 1, 1942, with interest at 2 per cent per annum.

Western Maryland.—*Annual Report.*—The 1941 annual report of this company shows net income of $2,554,354 after interest and other charges, an increase of $453,619 as compared with net income in 1940. Selected items from the income statement follow:

	1941	Increase or Decrease Compared with 1940
Railway Operating Revenues	$22,810,110	+$3,663,906
Total Operating Expenses	14,784,972	+2,446,192
Operating ratio	64.82	+0.37
Net Revenue from Operations	8,025,137	+1,217,714
Railway tax accruals	2,525,228	+976,258
Railway operating income	5,499,909	+241,456
Hire of equipment—Net	447,424	+248,712
Joint facility rents—Net	152,313	+1,556
Net Railway Operating Income	5,795,020	+488,612
Other income	114,128	−21,829
Gross Income	5,909,148	+466,783
Rent for leased roads	530,126	.....
Interest on funded debt	2,626,031	−35,259
Total Deductions from Gross Income	3,354,794	+13,164
Net Income	$2,554,354	+$453,619

Average Prices of Stocks and Bonds

	May 5	Last week	Last year
Average price of 20 representative railway stocks..	24.85	24.22	29.82
Average price of 20 representative railway bonds..	66.55	66.79	66.03

Dividends Declared

Cleveland & Pittsburgh.—Registered Stock, 87½¢, quarterly; Special Guaranteed, 50¢, quarterly, both payable June 1 to holders of record May 11.

Elmira & Williamsport.—7 Per Cent Preferred, $1.60, payable July 1 to holders of record June 20.

Reading Company.—4 Per Cent Non-Cumulative First Preferred, 50¢, quarterly, payable June 11 to holders of record May 21.

Richmond, Fredericksburg & Potomac.—6 Per Cent Guaranteed Preferred, $3.00 semi-annually; Participating, $2.00; 7 Per Cent Guaranteed Preferred, $3.50, semi-annually; Participating, $1.00, all payable May 1 to holders of record April 30.

Railway Officers

EXECUTIVE

B. H. Lord, general manager of the Wrightsville & Tennille, the Wadley Southern and the Louisville & Wadley, with headquarters at Dublin, Ga., has been elected president and general manager of all three roads, succeeding **Henry D. Pollard,** whose death on January 7 was reported in the *Railway Age* of January 10.

F. R. Gerard, general manager of the Lehigh Valley, with headquarters at Bethlehem, Pa., has been promoted to vice-president and general manager. A photograph of Mr. Gerard and a biographical sketch of his railroad career were published in the *Railway Age* of January 24 at the time of his appointment as general manager. **D. J. Mullane,** chief clerk to the president and assistant secretary of the

D. J. Mullane

company, has been promoted to assistant to president.

Mr. Mullane entered the service of the Lehigh Valley in 1915 as stenographer and clerk in the office of the division engineer at Jersey City, N. J., and at the time of his recent promotion he was serving as chief clerk to the president and assistant secretary of the company. Mr. Mullane is a former president of the Metropolitan Traffic Association of New York.

E. H. Burgess, general solicitor of the Lehigh Valley, with headquarters at New York, has been elected chairman of the Traffic Executive Association—Eastern territory and of the Trunk Line Association, succeeding **D. T. Lawrence,** whose retirement after 52 consecutive years of railroad service was reported in the *Railway Age* of May 2. **N. W. Hawkes,** chairman of the Freight Traffic Managers Committee of the Trunk Line Association, has been appointed vice-chairman of the Traffic Executive Association and the Trunk Line Association, succeeding **Harry Wilson,** who has retired after 58 years of continuous railway service.

Mr. Burgess was born on September 1, 1888, at Columbus, Kan., and received his

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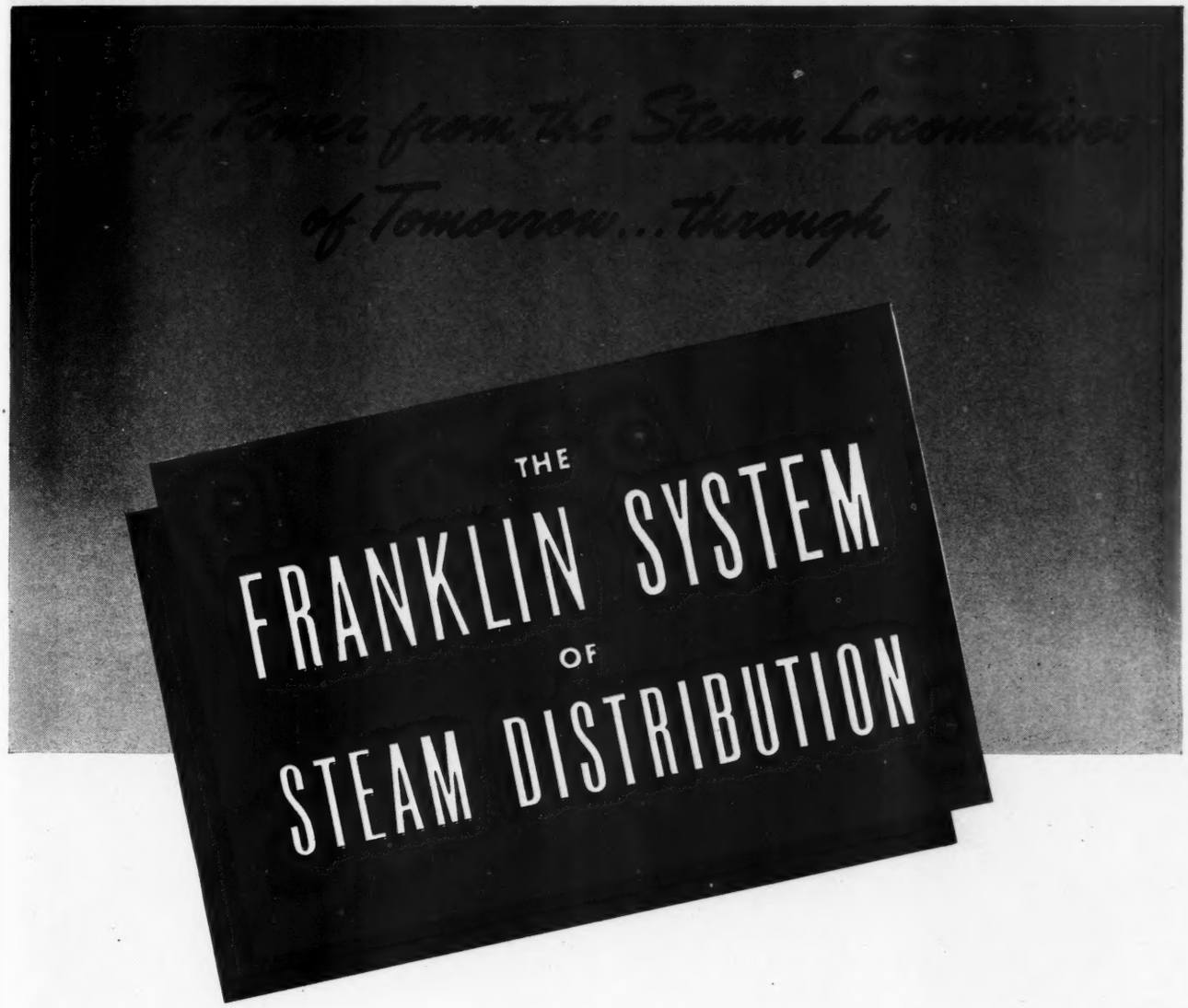

The Franklin System of Steam Distribution makes available 30 to 40% more horsepower for revenue work — without increasing the size of the locomotive. This large increase is accomplished by means of the following features:

1. Separation of valve events, so that admission, cut-off, release and compression are independently controlled.
2. Absolutely fixed valve events at all speeds and all cut-offs.
3. Large inlet and exhaust passages and improved steam flow.
4. Reduced cylinder clearance volume.
5. Reduced weight of moving masses and reduced mechanical friction.

Through the results obtained by the application of The Franklin System of Steam Distribution it is now possible to build smaller locomotives with the same power or the same size locomotives with even greater power.

FRANKLIN RAILWAY SUPPLY COMPANY, INC. NEW YORK CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

A.B. degree from Pacific College (Oregon) in 1909; his B.S. from Washington State in 1910 and his LL.B. in 1914 from the University of Pennsylvania Law School. From 1910 to 1911 Mr. Burgess was principal of the high school at Sprague, Wash., and entered railway service in June, 1914, as assistant to general solicitor of the Lehigh Valley. In March, 1922, he was promoted to assistant general solicitor and five years later he was promoted to general solicitor, which position he held until his election to the chairmanship of the above associations. A lecturer in the University of Pennsylvania Law School since 1914, Mr. Burgess is a member of the American Bar Association, the New York State Bar Association, New York County Lawyers Association and president of the Association of Practitioners before the Interstate Commerce Commission.

Mr. Hawkes was born at Appleton, Me., on July 21, 1882, and was educated at the Cambridge High and Latin school. He began his railway career with the Grand

E. H. Burgess

Trunk in 1900 and five years later he went with the Central Vermont, serving subsequently as general freight agent at St. Albans, Vt., and New England traffic manager at Boston, Mass. In addition, he represented the Grand Trunk and Canadian National. In 1927 Mr. Hawkes became system freight traffic manager of the Central Vermont and Canadian National. During federal control he was a member of the New England District Freight Traffic Committee at Boston and organizer and first chairman of the New England Freight and Passenger Association. After serving from 1927 to 1931 as vice-president in charge of traffic of the Boston & Maine, he was appointed a member of the Official Classification Committee at New York. Two years later he was chosen chairman of the Freight Traffic Managers Committee of the Trunk Line Association, which position he held until his recent appointment.

Mr. Wilson entered railroad service in November, 1883, as messenger in the general freight office of the West Shore and in November, 1889, he became affiliated with the Erie, serving successively as rate clerk, chief clerk, division freight agent and assistant general freight agent. On March 1, 1920, he was elected a member of the Auxiliary Committee of the Trunk Line Association, becoming chairman of the General Freight Committee later that year. In June, 1927, Mr. Wilson became chairman of the Freight Traffic Managers Committee and in April, 1933, he became vice-chairman of the Traffic Executive Association—Eastern territory and of the Trunk Line Association, which positions he held until his retirement.

FINANCIAL, LEGAL AND ACCOUNTING

H. L. Lehmkuhle, auditor of the New York, Chicago & St. Louis (Nickel Plate), has been promoted to general auditor, with headquarters as before at Cleveland, Ohio, succeeding **A. W. Latham,** who has retired from active service, and **C. H. Schempp,** assistant auditor of revenues, has been advanced to auditor, replacing Mr. Lehmkuhle. **E. S. Lynch**, general accountant, has been appointed auditor of disbursements, relieving **G. A. Wallis**, who has been appointed assistant to the general auditor.

Mr. Latham was born at Bellevue, Ohio, on January 21, 1878, and attended Oberlin Business college. He entered railway service in March, 1904, as a clerk on the Nickel Plate at Leipsic Junction, Ohio. In February, 1907, he was promoted to general bookkeeper and in May, 1918, he was advanced to general accountant. In 1920 he was promoted to assistant auditor and in October, 1922, he was appointed assistant comptroller. Mr. Latham was appointed special accountant in May, 1933, and in April, 1937, he was promoted to auditor, with headquarters at Cleveland. He was advanced to general auditor on May 1, 1939, which position he held until his retirement.

C. A. Major, assistant general counsel of the Lehigh Valley, with headquarters at New York, has been appointed general solicitor, with the same headquarters, succeeding **E. H. Burgess,** who has resigned

C. A. Major

to become chairman of the Traffic Executive Association—Eastern territory and of the Trunk Line Association, as noted elsewhere in these columns. Mr. Major was born at Otisville, N. Y., and received his law degree from Cornell University in 1913. He entered the legal department of the Lehigh Valley in 1916, becoming assistant general solicitor in 1920. He was promoted to assistant general counsel in 1927, holding this position until his recent appointment.

J. S. Porter has been appointed assistant general claim agent for the Texas & Pacific, with headquarters at Dallas, Tex.

George O'Donnell, a member of the firm of Lawton & Cunningham, Savannah, Ga., has been elected general attorney for the Central of Georgia, with headquarters at Savannah.

Cecil H. Mitchell, whose promotion to general claim agent of the Kansas City Southern-Louisiana & Arkansas lines, with headquarters at Shreveport, La., was reported in the *Railway Age* of April 11, was born at Neame, La., on March 7, 1899, and attended Southwestern University at Georgetown, Tex., joining the U. S. Army while at school. He entered railway service on August 8, 1918, as a clerk in the engi-

Cecil H. Mitchell

neering department of the Kansas City Southern at Texarkana, Tex., later being promoted to secretary, assistant accountant and accountant. On April 1, 1928, Mr. Mitchell was transferred to the claim department at Texarkana as chief clerk and on May 1, 1929, he was advanced to assistant claim agent. He was promoted to claim agent, with headquarters at Shreveport, on July 1, 1935, which position he held until his recent promotion.

OPERATING

J. J. Peacock has been appointed trainmaster of the Norfolk district of the Atlantic Coast Line, with headquarters at Tarboro, N. C.

L. W. Green has been appointed transportation assistant of the Atlantic Coast Line, with headquarters at Wilmington, N. C.

A. S. McCann, assistant terminal superintendent on the Southern Pacific at Oakland Pier, Cal., has been promoted to terminal superintendent, with headquarters at West Oakland, Cal., succeeding **E. D. Moody,** who has been appointed assistant division superintendent, with headquarters

at Oakland Pier. The headquarters of **L. R. Smith,** assistant division superintendent at Oakland Pier, have been transferred to Stockton, Cal.

H. F. Neville has been appointed trainmaster of the Buffalo division of the New York Central system and **J. H. Sheedy** has been appointed trainmaster of the Pennsylvania division.

E. W. Davis, assistant trainmaster on the Pennsylvania at Columbus, Ohio, has been promoted to trainmaster on the Toledo division, succeeding **A. L. Hunt**, who has left for military service, reporting April 17 as a major in the 730th Railway battalion.

Eugene H. Hite, assistant superintendent for the Railway Express Agency, Inc., at Salt Lake City, Utah, has been promoted to superintendent of the Northern California, Nevada and Oregon division, with headquarters at Sacramento, Cal., succeeding **V. R. Burton,** whose death on March 25 is reported elsewhere in these columns.

F. E. Bromley, assistant superintendent on the Missouri Pacific, with headquarters at McGehee, Ark., has been promoted to director of terminals and freight train classification, with headquarters at St. Louis, Mo. **G. W. Griffing,** trainmaster at Monroe, La., has been promoted to assistant superintendent at McGehee, succeeding Mr. Bromley, and **C. A. Hughes,** trainmaster at Concordia, Kan., has been transferred to Monroe, replacing Mr. Griffing. **F. A. Roberson,** trainmaster at Cole, Mo., has been transferred to Concordia, relieving Mr. Hughes, and **H. H. Green** has been appointed trainmaster at Cole, succeeding Mr. Roberson.

Donald F. Stevens, whose appointment as general manager of the New York properties of the Baltimore & Ohio was reported in the *Railway Age* of March 7, entered the service of the Baltimore & Ohio in May, 1914, as assistant superintendent of fuel consumption at Baltimore, Md., and

Donald F. Stevens

was later engaged in the same work at Garrett and Chicago. He was appointed trainmaster at Garrett, Ind., in November, 1914, and was promoted to assistant superintendent at Grafton, W. Va., in May, 1915. He became superintendent at Newark, Ohio, on January 1, 1916, being transferred to New Castle Junction, Pa., on September 1, 1918, and to Akron, Ohio, on April 1, 1922. He was promoted to general superintendent at Cleveland, Ohio, on April 15, 1923, and on June 15, 1929, he was appointed general superintendent of transportation at Baltimore, which position he held until his recent appointment.

Lloyd F. Donald, assistant general manager of the Eastern lines of the Chicago, Wilwaukee, St. Paul & Pacific, with headquarters at Chicago, has been promoted to general manager of the Western lines, with headquarters at Seattle, Wash., succeeding **Colonel Norman A. Ryan,** who has been summoned for active duty with the Military Railway Service, as reported in the *Railway Age* of May 2. **L. K. Sorensen,** general superintendent, with headquarters at Milwaukee, Wis., has been promoted to assistant general manager at Chicago, relieving Mr. Donald, and **H. C. Munson,** division superintendent at La Cross, Wis., has been advanced to general superintendent at Milwaukee, replacing Mr. Sorensen. **William J. Whalen,** division

L. K. Sorensen

superintendent at Savanna, Ill., has been transferred to La Crosse, succeeding Mr. Munson, and **Willard G. Bowen,** division superintendent at Marion, Iowa, has been transferred to Savanna, relieving Mr. Whalen. **Otto A. Beerman,** division superintendent at Terre Haute, Ind., has been transferred to Marion, replacing Mr. Bowen, and **A. T. Berg,** superintendent of terminals at Chicago, has been transferred to Terre Haute, succeeding Mr. Beerman. **E. G. Kiesele,** assistant superintendent at Chicago, has been promoted to superintendent of terminals at that point, succeeding Mr. Berg. **Walter J. Hotchkiss,** division superintendent at Austin, Minn., has been transferred to Aberdeen, S. D., relieving **R. C. Dodds,** who, in turn, has been transferred to Austin, replacing Mr. Hotchkiss. **L. W. King,** trainmaster at Chicago, has been promoted to assistant superintendent at that point, succeeding Mr. Kiesele and **R. W. Graves,** trainmaster at Madison, Wis., has been transferred to Chicago, relieving Mr. King. **W. J. Rellihan,** trainmaster at Milwaukee, has been transferred to Madison, replacing Mr. Graves, and **C. E. Crippen,** trainmaster at Minneapolis, Minn., has been transferred to Milwaukee, succeeding Mr. Rellihan. **A. J. Farnham,** trainmaster at Green Bay, Wis., has been transferred to Minneapolis, relieving Mr. Crippen and **J. M. Moudry,** chief train dispatcher at Sa-

L. F. Donald

vanna, has been promoted to trainmaster at Green Bay, replacing Mr. Farnham.

Mr. Donald was born at Savanna on April 4, 1894, and entered railway service in June, 1912, as a roundhouse clerk on the Milwaukee at Savanna. During the next few years he served as a roadmaster's clerk at Elgin, Ill., as trainmaster's timekeeper at Savanna, and as a clerk in the office of the superintendent at Milwaukee. In 1917, he was advanced to chief clerk to the superintendent at Milwaukee, and he was later transferred to Green Bay, and Sioux City, Iowa. In 1921, he was appointed chief clerk to the assistant general manager in Chicago, and in 1922, he was promoted to trainmaster at Chicago, later being transferred successively to Sioux City, St. Paul, Minn., and Montevideo, Minn. Mr. Donald was promoted to assistant superintendent at Terre Haute, on November 1, 1926, and in 1928 he was transferred to Chicago. On January 1,

H. C. Munson

1929, he was promoted to superintendent at Terre Haute, and on November 1, 1930, he was transferred to the Dubuque and Illinois division, with headquarters at Savanna. Mr. Donald was transferred to the LaCross and River division, with headquarters at LaCross, on July 14, 1935, and

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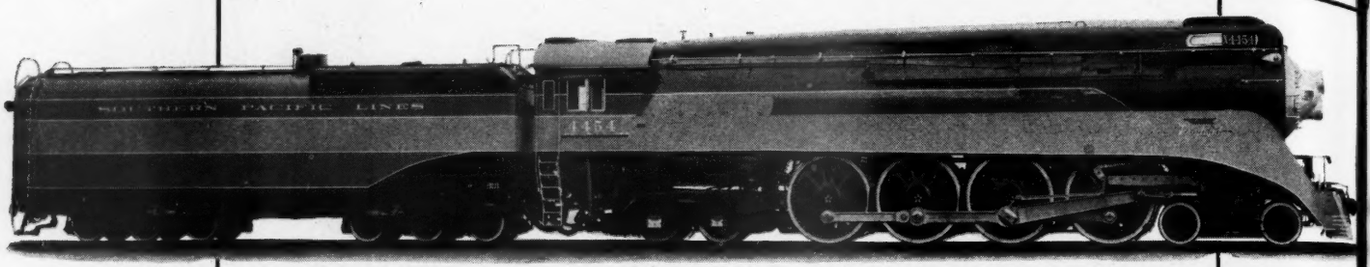
Southern Pacific Lines

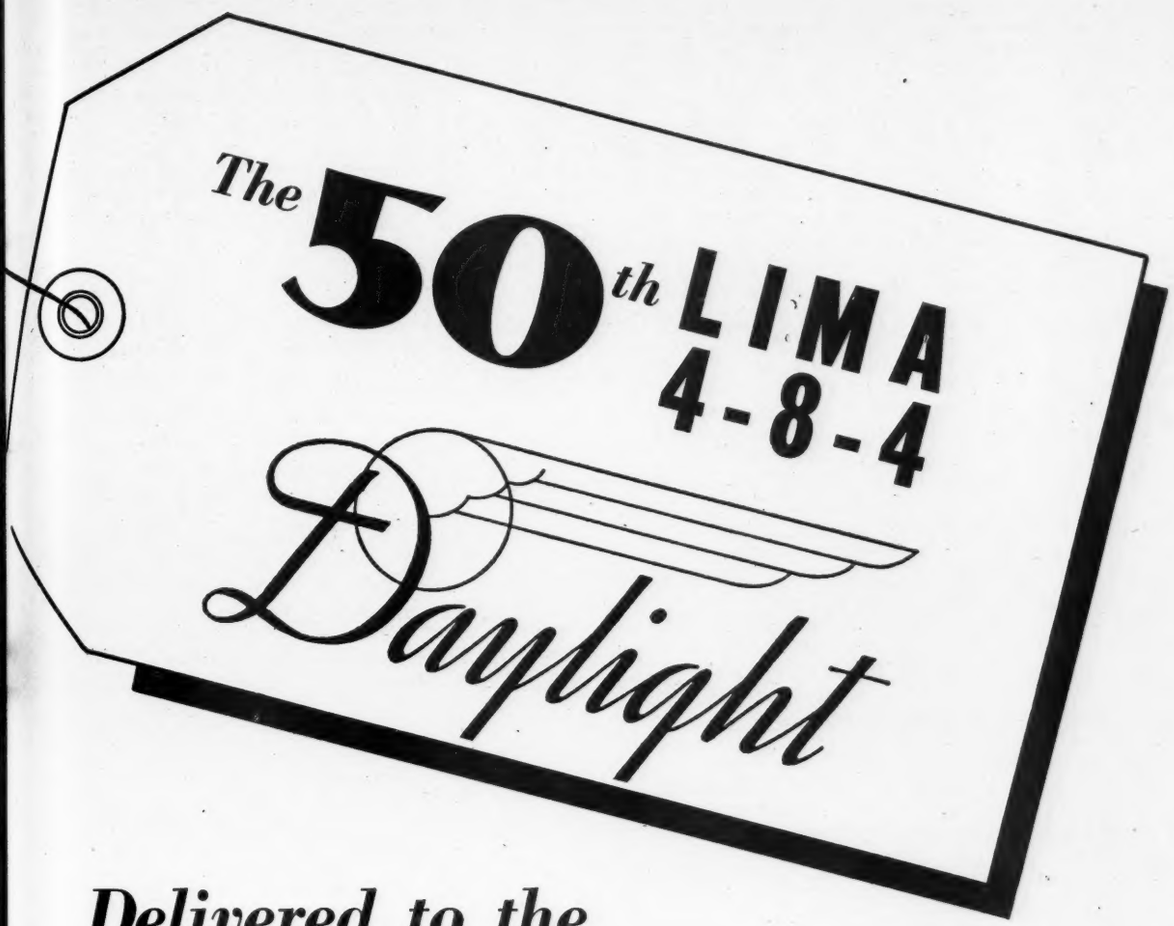


4-8-4

WEIGHT IN WORKING ORDER POUNDS				
On Drivers	Engine Truck	Trailer Truck	Total Engine	Tender 2/3 Capacity Loaded
277,700	80,600	119,000	477,300	317,250
WHEEL BASE			TRACTIVE EFFORT	
Driving	Engine	Engine & Tender	Main Cylinders	With Booster
21'—6"	47'—8"	96'—3"	64,760	77,760
BOILER		CYLINDERS		DRIVING WHEEL
Diameter	Pressure	Diameter	Stroke	Diameter
86" O.D. at Front	300 lbs.	25½"	32"	80"

LIMA LOCOMOTIVE WORKS INCORPORATED

LIMA LOCOMOTIVE WORKS,



Delivered to the

SOUTHERN PACIFIC

The recent delivery of ten of these famous 4-8-4 "Daylight" locomotives by Lima to the Southern Pacific brings the present total fleet of these engines to fifty.

Operating between San Francisco and Los Angeles since 1936, these locomotives have made impressive operating records both in daylight passenger service and in overnight "hotshot" freight service.

Evidence of their excellent performance is the fact that the Southern Pacific has just placed another order for 10 more "Daylights".

INCORPORATED, LIMA, OHIO

on October 14, 1939, he was advanced to general superintendent, with headquarters at Milwaukee. In December, 1940, he was promoted to assistant general manager of the Eastern lines, with headquarters at Chicago, the position he held until his recent promotion.

Mr. Sorensen entered the service of the Milwaukee on August 14, 1907, as a carpenter at Savanna, later being transferred to Harlowton, Mont. On October 15, 1916, he was promoted to bridge and building foreman at Harlowton and on November 1, 1919, he was advanced to chief carpenter, with the same headquarters. Mr. Sorensen was promoted to trainmaster at Aberdeen, on November 5, 1925, and was further advanced to division superintendent, with headquarters at Deer Lodge, Mont., on February 1, 1927. In the spring of 1936, Mr. Sorensen was transferred to Butte, Mont., and on January 1, 1940, to the Coast division, with headquarters at Tacoma, Wash. In December, 1940, he was promoted to general superintendent, with headquarters at Milwaukee, the position he held until his recent promotion.

Mr. Munson was born at Oslo, Norway, on June 25, 1901, and graduated in civil engineering from the State University of Iowa in June, 1923. He entered railway service on June 6, 1923, as a rodman, on construction work on the Midwaukee at Momence, Ill., and in October, 1923, he was advanced to instrumentman at Marion, Iowa, later being transferred to Chicago. In April, 1928, he was promoted to assistant engineer at Chicago, and in March, 1929, he was advanced to division engineer, with headquarters at Sioux City, Iowa. Mr. Munson was promoted to trainmaster, with headquarters at Ottumwa, Iowa, on April 1, 1931, and on September 1, 1934, he was transferred to Savanna. On January 15, 1936, he was transferred to La Cross, as trainmaster of the First division, and on December 16, 1937, he was promoted to assistant superintendent, with headquarters at Wausau, Wis. In September, 1938, he was promoted to superintendent, with headquarters at Austin, and in October, 1939, he was transferred to Savanna. In December, 1940, Mr. Munson was transferred to La Crosse, where he remained until his recent promotion.

O. H. McFarlin, trainmaster on the Illinois Central at Memphis, Tenn., has been promoted to assistant superintendent of the Memphis division, with the same headquarters, a newly created position, and **E. H. Buelow,** assistant trainmaster at Vicksburg, Miss., has been advanced to trainmaster at Memphis, succeeding Mr. McFarlin.

ENGINEERING & SIGNALING

G. E. Martin, supervisor of bridges and buildings on the Illinois Central, with headquarters at Paducah, Ky., has been promoted to superintendent of water service, with headquarters at Chicago, succeeding **Clarence R. Knowles,** who retired from active service on May 1. Mr. Knowles was born at La Porte, Ind., on July 7, 1879, and attended Farrell's School for Boys, Hopkinsville, Ky., took special courses in private schools and an International Correspondence School course in civil engineering. He entered railway service in 1900 as a water service repairman on the Illinois Central and in 1902 he was promoted to water service foreman. Four years later he was appointed inspector of water service and in 1912 he was advanced to general foreman of water service. He was promoted to superintendent of water service, with headquarters at Chicago, in 1916, which position he held until his retirement. Mr. Knowles had been active in the affairs of numerous associations for many years, including the American Railway Engineering Association, of which he was a director from 1930 to 1933, chairman of the Water Service committee from 1922 to 1930 and chairman of the Maintenance of Way Work Equipment committee from 1931 to 1937. He was president of the American Railway Bridge and Building Association in 1921 and 1922 and editor of the Water Service section of the 1926, 1929 and 1939 editions of the Railway Engineering and Maintenance Cyclopedia. Mr. Knowles was also chairman of the Illinois section of the American Water Works Association in 1928 and 1929 and a national director of that association from 1930 to 1933.

TRAFFIC

J. S. Combs has been appointed general agent, freight traffic department, Central of Georgia, with headquarters at Savannah, Ga.

A. J. Crookshank, assistant chief clerk in the office of the vice-president in charge of freight traffic of the New York Central at New York, has been appointed division freight agent at Columbus, Ohio, succeeding **L. H. Mussman,** who retired on May 1 after more than 49 years of service.

F. G. Altenburg, general agent on the New York, Chicago & St. Louis (Nickel Plate) at Cincinnati, Ohio, has been transferred to Milwaukee, Wis., succeeding **N. J. Griffin,** who has been granted a leave of absence because of illness. **M. M. Clement,** general agent at Philadelphia, Pa., has been transferred to Cincinnati, relieving Mr. Altenburg, and **J. T. Grant,** assistant eastern freight agent at New York, has been appointed general agent at Philadelphia, replacing Mr. Clement. **C. J. Joel,** general agent-perishables at New York, has been appointed assistant eastern freight agent at that point, succeeding Mr. Grant, and **W. A. George,** traffic representative at New York, has been promoted to general agent-perishables, relieving Mr. Joel.

Darroch Crookes, special representative in the bureau of Sun Valley solicitation for the Union Pacific at Portland, Ore., has been appointed supervisor of resort solicitation, with jurisdiction in all principal cities between Omaha, Neb., and New York. **Don W. Fraser,** special representative with headquarters at Denver, Colo., has been appointed supervisor of resort solicitation in the territory between Kansas City, Mo., and the West coast, including the Pacific Northwest. **W. J. Castagneto,** Sun Valley representative, with headquarters at Omaha, has been transferred to Portland.

Charles T. Carey, former assistant passenger traffic manager in charge of resort solicitation of the Union Pacific, with headquarters at Omaha, Neb., is now serving in the transportation department of the United States Army air corps at Washington, D. C.

John C. Moore, whose promotion to general freight and passenger agent of the Spokane, Portland & Seattle, with headquarters at Portland, Ore., was reported in the *Railway Age* of April 25, was born at Anaconda, Mont., on March 24, 1887, and entered railway service in June, 1904, as a messenger on the Oregon Railroad & Navigation Company (now part of the Union Pacific) at Huntington, Ore., later serving as a car checker at that point and a bill clerk at Portland. In September, 1909, Mr. Moore went with S. P. & S. as a rate clerk in the traffic department at Portland and in October, 1913, he was promoted to assistant chief clerk. In July, 1914, he was advanced to chief clerk and in March, 1920, he was appointed city freight agent. He was promoted to general agent on August 1, 1924, and on February 1, 1941, he was appointed assistant to the general freight agent. Two months later, Mr. Moore was advanced to assistant general freight agent, with headquarters as before at Portland, which position he held until his recent promotion, effective April 12.

MECHANICAL

Carl Heaton, chief clerk to the superintendent of motive power of the New York, Chicago & St. Louis (Nickel Plate), has been promoted to assistant to the superintendent of motive power, with headquarters as before at Cleveland, Ohio.

OBITUARY

Milton C. Browning, division freight agent for the Louisville & Nashville at Lexington, Ky., died in a hospital at Covington, Tenn., on April 30.

G. T. Pettigrew, former assistant general freight traffic manager of the Canadian National, died at his home in Montreal on April 28 in his 69th year. Mr. Pettigrew was born at Sorel, Que., on March 8, 1874, and entered railway service as an apprentice with the traffic department of the Grand Trunk at Montreal in May, 1888, serving successively as clerk and chief clerk in that department. In July, 1907, Mr. Pettigrew was appointed division freight agent at Stratford, Ont., being transferred to Montreal in November, 1911. In July, 1923, he became freight traffic representative of the Canadian National at New York and in October, 1923, he returned to Montreal as tariff inspector, later becoming division freight agent. In February, 1928, Mr. Pettigrew became general freight agent of the Grand Trunk-Canadian National at Detroit, Mich., becoming assistant general freight traffic manager at Montreal in January, 1930, which position he held until his retirement in October, 1938.

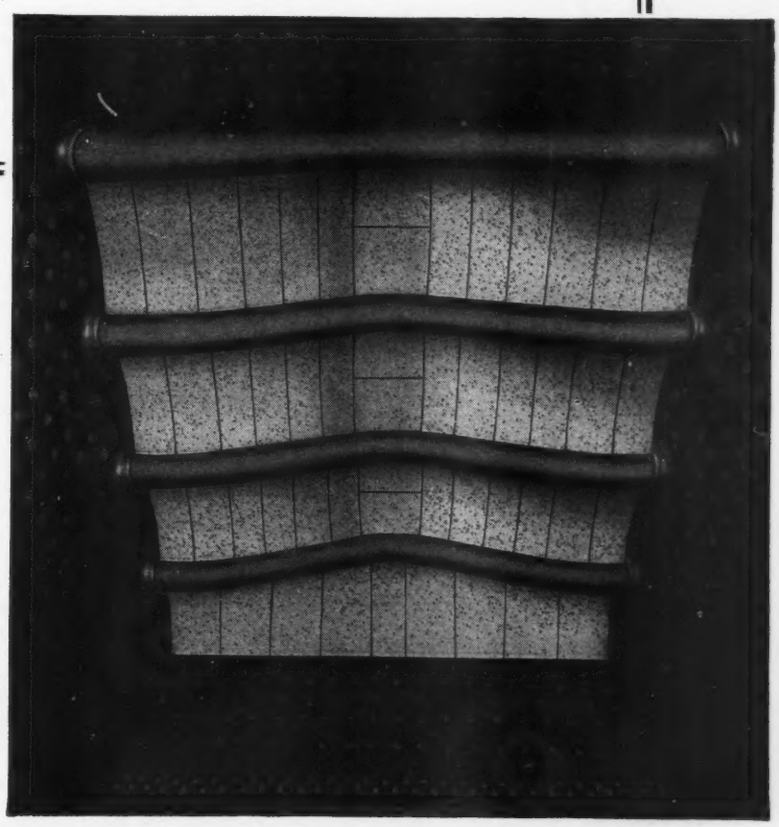
Table of Revenues and Expenses Begins on next left-hand page

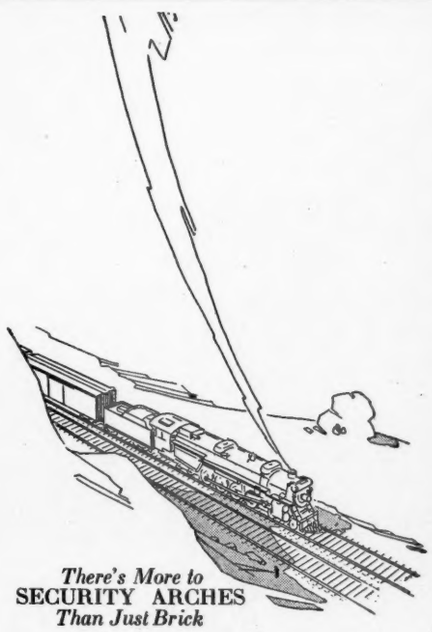
FUEL ECONOMY
is maximum ton-miles from every pound of fuel!

Security Brick Arches are correctly designed to compel every pound of fuel to develop its share of full boiler capacity.

Security Arch Brick are made from selected clays and carefully burned to assure maximum arch life in the locomotive firebox.

By every standard of value Security Arch Brick assures maximum economy.

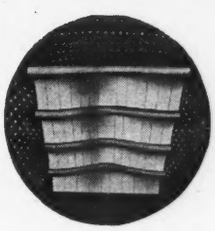




There's More to
SECURITY ARCHES
Than Just Brick

HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists



AMERICAN ARCH CO.
INCORPORATED
60 EAST 42nd STREET, NEW YORK, N. Y.
Locomotive Combustion Specialists

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1942

Name of road		Av. mileage operated during period	Operating revenues			Operating expenses					Operating ratio	Net from railway operation	Operating income	Net railway operating income	
			Freight	Passenger	Total (inc. misc.)	Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total				1942	1941
Akron, Canton & Youngstown	March	171	$274,929	$52	$283,959	$36,421	$29,825	$15,594	$83,274	$176,930	62.3	107,029	72,392	61,080	67,968
	3 mos.	171	745,426	190	773,647	107,544	80,208	46,490	238,614	507,056	65.5	266,591	188,826	146,466	184,912
Alton	March	959	1,725,301	290,206	2,247,059	200,792	316,753	53,899	986,347	1,651,076	73.5	595,983	472,749	254,055	163,355
	3 mos.	959	4,561,270	912,167	6,123,902	545,923	855,634	148,857	2,538,477	4,366,147	71.3	1,757,755	1,398,585	832,674	297,318
Atchison, Topeka & Santa Fe System	March	13,367	19,516,038	2,407,517	23,701,483	2,459,164	4,133,191	514,855	7,203,798	14,751,545	62.2	8,949,938	4,439,689	4,533,199	1,489,210
	3 mos.	13,369	54,752,414	7,738,008	67,217,647	7,032,490	12,290,051	1,470,627	21,288,509	43,414,329	64.6	23,803,318	11,277,431	11,476,042	5,298,421
Atlanta & West Point	March	93	198,247	59,483	287,747	25,985	35,432	9,006	101,351	185,570	64.5	102,177	44,154	24,855	22,249
	3 mos	93	518,145	156,025	756,563	74,994	102,888	27,332	290,171	534,475	70.8	222,088	115,679	65,763	44,881
Western of Alabama	March	133	224,660	60,975	309,724	28,447	44,766	8,930	96,114	190,644	61.6	119,080	45,923	40,257	21,611
	3 mos.	133	573,929	160,787	802,258	80,061	125,235	26,909	272,178	539,784	67.2	262,474	129,431	112,867	53,694
Atlanta, Birmingham & Coast	March	639	359,598	40,993	424,914	49,685	64,922	26,946	186,833	346,530	81.6	78,384	50,560	13,792	12,782
	3 mos	639	1,018,447	108,087	1,191,119	151,103	182,658	78,730	525,132	988,824	83.0	202,295	122,469	20,862	17,228
Atlantic Coast Line	March	5,007	6,572,040	1,872,964	9,069,455	619,927	1,415,688	178,173	2,770,728	5,309,491	58.5	3,759,964	2,754,964	2,504,108	1,285,331
	3 mos.	5,009	16,684,693	4,807,742	23,135,835	1,746,481	3,902,067	594,082	7,772,236	14,931,891	64.5	8,203,944	5,848,944	5,130,103	3,620,822
Charleston & Western Carolina	March	343	321,078	9,887	337,738	35,012	47,717	10,331	98,947	198,838	58.9	138,900	93,900	91,010	83,415
	3 mos.	343	878,630	29,021	926,579	99,186	134,150	30,492	288,355	572,148	61.7	354,431	229,431	219,997	224,306
Baltimore & Ohio	March	6,273	21,312,211	1,619,165	24,018,828	1,852,500	5,233,954	475,188	8,015,077	16,319,793	68.0	7,699,035	5,632,457	5,135,766	4,358,050
	3 mos.	6,273	56,245,837	4,405,426	63,761,538	5,100,807	15,370,904	1,336,193	22,926,768	46,962,893	73.7	16,798,645	11,779,648	10,793,495	10,316,672
Staten Island Rapid Transit	March	24	95,357	74,691	178,421	12,461	27,382	1,141	91,584	146,162	81.9	32,259	5,087	—5,485	—31,669
	3 mos.	24	256,268	215,266	495,558	36,979	78,293	3,615	272,890	429,924	86.9	64,634	—16,989	—46,270	—83,536
Bangor & Aroostook	March	603	710,904	37,174	772,678	89,093	99,309	7,408	183,393	405,247	52.5	367,431	242,758	234,939	222,084
	3 mos.	603	1,840,287	94,721	2,002,008	271,560	287,739	17,887	523,361	1,177,750	58.8	824,258	527,876	540,345	513,598
Bessemer & Lake Erie	March	214	1,064,387	914	1,079,150	161,212	487,146	12,922	251,616	949,113	88.0	130,037	127,387	236,567	381,325
	3 mos.	214	2,813,454	2,403	2,853,965	401,637	1,981,761	40,972	733,131	3,277,654	114.8	—423,689	—550,849	—236,402	807,343
Boston & Maine	March	1,865	4,997,759	890,550	6,447,575	684,138	892,287	72,722	2,196,582	4,037,325	62.6	2,410,250	1,585,590	1,248,556	806,391
	3 mos.	1,866	12,648,960	2,655,119	16,852,577	2,005,249	2,653,149	211,414	6,366,756	11,784,930	69.9	5,067,647	3,317,230	2,385,043	2,022,181
Burlington, Rock Island	March	251	131,095	33,101	172,189	22,727	19,330	2,342	61,474	116,751	67.8	55,438	45,996	32,350	—4,983
	3 mos.	251	287,779	87,146	399,239	64,531	49,326	6,925	166,750	320,813	80.4	78,426	49,911	28,162	—47,639
Cambria & Indiana	March	37	183,012	.....	183,074	7,159	59,670	452	17,916	90,762	49.58	92,312	6,819	81,047	106,501
	3 mos.	37	515,850	.....	516,056	20,385	175,693	1,572	52,145	268,390	52.00	247,666	11,232	230,550	310,168
Canadian Pacific Lines in Maine	March	234	406,900	39,329	461,710	46,769	69,789	6,417	164,986	294,336	63.7	167,374	151,249	130,014	168,717
	3 mos.	234	1,214,742	112,223	1,375,807	120,231	173,330	20,422	427,703	761,439	55.3	614,368	567,119	483,620	409,314
Canadian Pacific Lines in Vermont	March	90	89,308	7,677	107,504	15,846	25,138	2,320	81,709	128,317	119.4	—20,813	—28,113	—52,499	—19,486
	3 mos.	90	269,168	23,765	325,331	56,405	75,520	7,260	242,011	391,519	120.3	—66,188	—88,712	—160,532	—79,388
Central of Georgia	March	1,815	1,673,138	306,340	2,189,629	232,201	341,638	59,416	796,818	1,526,445	69.7	663,184	524,172	496,593	334,230
	3 mos.	1,815	4,570,096	796,328	5,912,180	681,296	969,918	181,498	2,382,603	4,499,939	76.1	1,412,241	999,036	938,536	672,892
Central of New Jersey	March	661	3,751,805	444,625	4,425,223	408,896	763,450	47,470	1,770,125	3,093,890	69.9	1,331,333	870,849	575,845	206,295
	3 mos.	661	10,184,017	1,278,339	12,165,161	1,202,254	2,286,653	144,491	5,108,768	9,058,372	74.5	3,106,789	1,898,379	1,076,453	533,306
Central Vermont	March	422	543,897	47,000	630,511	76,545	101,131	11,116	274,089	487,218	77.3	143,293	112,835	70,179	94,666
	3 mos.	422	1,604,940	130,000	1,842,812	226,109	309,677	32,741	800,249	1,434,649	77.9	408,163	318,452	193,462	220,253
Chesapeake & Ohio	March	3,124	12,257,712	529,033	13,190,594	1,430,147	2,435,436	219,720	3,192,783	7,637,797	57.9	5,552,797	3,232,281	3,458,390	4,692,610
	3 mos.	3,124	33,262,067	1,517,624	35,832,796	4,103,929	7,066,937	669,282	9,421,774	22,310,206	62.3	13,522,590	6,610,684	7,348,267	10,268,474
Chicago & Eastern Illinois	March	925	1,267,967	220,766	1,663,450	180,832	288,345	58,163	654,585	1,256,928	75.6	406,522	277,522	159,380	327,635
	3 mos.	925	3,762,232	685,861	4,939,261	496,369	823,828	181,561	1,931,682	3,659,510	74.1	1,279,751	889,751	534,181	675,222
Chicago & Illinois Midland	March	131	494,629	725	518,850	50,363	79,815	20,819	127,921	300,850	58.0	218,000	91,028	80,313	111,229
	3 mos.	131	1,456,065	2,142	1,516,256	147,727	244,104	67,856	383,332	908,796	59.9	607,460	248,086	215,161	304,604
Chicago & North Western	March	8,265	8,035,561	1,194,113	10,211,821	1,150,237	2,044,193	190,882	3,667,778	7,440,988	72.9	2,770,833	2,038,437	1,859,224	1,108,734
	3 mos.	8,265	21,894,839	3,526,374	28,275,665	3,369,225	5,957,670	580,198	11,156,454	22,196,629	78.5	6,079,036	3,967,828	3,243,635	2,394,681
Chicago, Burlington & Quincy	March	9,085	9,421,976	998,774	11,534,281	829,578	1,687,997	245,099	3,671,078	6,817,375	59.1	4,716,906	1,611,540	1,421,592	1,831,577
	3 mos.	9,095	26,804,352	3,109,951	33,009,021	2,464,887	5,293,422	749,827	10,966,259	20,606,892	62.4	12,402,129	6,487,236	5,835,994	5,031,243
Chicago Great Western	March	1,502	1,805,336	101,123	2,036,839	238,261	280,221	61,207	702,292	1,349,459	66.3	687,380	428,678	248,254	225,499
	3 mos.	1,502	5,139,206	264,656	5,786,726	684,456	819,222	186,597	2,175,805	4,043,521	69.9	1,743,205	1,187,286	610,014	552,813
Chicago, Indianapolis & Louisville	March	549	856,279	43,270	971,149	86,814	165,527	29,691	313,329	631,325	65.0	339,824	284,371	216,368	185,816
	3 mos.	549	2,446,046	126,914	2,769,223	230,709	502,094	88,062	940,581	1,869,425	67.5	899,798	749,452	522,682	380,783

Continued on next left-hand page

What is a WELL-BALANCED BOILER?

A well balanced boiler has ample grate and combustion areas . . . maximum evaporating surface within specified limits . . . and maximum superheating surface with maximum free steam area. This can be accomplished with a large number of small flues, each containing an Elesco superheater loop.

Maximum superheating surface means more free steam area and higher superheat. Higher superheat means higher cylinder efficiency with increased cylinder horsepower.

These factors should be incorporated in all new locomotives . . . and can be used to advantage when old power is modernized.

BUY DEFENSE BONDS for VICTORY

A-1495

ELESCO

SUPERHEATERS • FEEDWATER HEATERS
AMERICAN THROTTLES • STEAM DRYERS
EXHAUST STEAM INJECTORS • PYROMETERS

THE SUPERHEATER COMPANY

Representative of
AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street, NEW YORK
122 S. Michigan Blvd., CHICAGO

Montreal, Canada
THE SUPERHEATER COMPANY, LTD.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1942	Net railway operating income 1941
Chicago, Milwaukee, St. Paul & Pacific	March	10,821	$11,154,813	$936,378	$13,223,498	$1,537,972	$2,109,594	$230,049	$4,601,641	$8,969,381	67.8	$4,254,117	$2,566,117	$2,278,744	$2,665,828
	3 mos.	10,821	32,315,970	2,774,295	38,194,259	3,659,747	6,032,964	701,660	13,758,610	25,614,072	67.1	12,580,187	8,503,187	7,519,201	6,087,751
Chicago, Rock Island & Pacific	March	7,925	7,639,120	1,327,807	9,614,065	929,619	1,582,222	289,516	3,373,793	6,606,415	68.7	3,007,650	2,467,298	2,167,835	1,449,363
	3 mos.	7,933	21,337,764	3,888,550	27,120,174	2,481,133	4,493,778	861,597	9,780,661	18,909,788	69.7	8,210,386	6,627,838	5,649,407	3,378,201
Chicago, St. Paul, Minneapolis & Omaha	March	1,629	1,557,883	165,279	1,845,859	180,398	325,250	43,054	790,726	1,410,096	76.4	435,763	308,441	208,017	54,905
	3 mos.	1,629	4,468,788	472,156	5,282,842	536,129	957,985	124,436	2,427,493	4,257,922	80.6	1,024,920	650,456	336,598	42,321
Clinchfield Railroad	March	308	971,223	4,402	981,982	49,391	142,921	21,891	199,156	432,885	44.1	549,097	444,475	451,580	570,344
	3 mos.	308	2,879,406	12,484	2,910,199	151,689	439,129	63,306	598,899	1,311,037	45.0	1,599,162	1,285,498	1,288,804	1,439,095
Colorado & Southern	March	755	616,175	113,356	794,979	52,321	149,147	16,907	276,474	526,552	66.2	268,427	205,224	184,015	95,556
	3 mos.	755	1,634,123	306,385	2,117,437	142,282	414,903	44,873	806,275	1,502,901	71.0	614,536	444,396	371,644	261,331
Fort Worth & Denver City	March	804	423,006	151,160	686,864	72,069	101,675	23,509	215,311	454,915	66.2	231,949	193,516	166,584	44,031
	3 mos.	804	1,282,432	447,543	2,032,107	207,094	292,125	65,006	637,401	1,319,453	64.9	712,654	597,806	507,177	126,083
Colorado & Wyoming	March	42	96,118	.....	148,557	9,503	12,878	843	52,752	81,022	54.5	67,535	30,466	31,350	42,457
	3 mos.	42	265,996	.....	421,520	27,823	37,801	2,591	153,880	235,133	55.7	186,387	89,961	89,520	122,123
Columbus & Greenville	March	168	91,971	3,112	101,967	21,270	17,538	3,947	35,606	91,316	89.6	10,651	—11,353	—9,303	12,618
	3 mos.	168	277,729	9,139	305,145	54,162	53,433	14,060	105,178	262,741	86.1	42,404	—853	3,604	26,663
Delaware & Hudson	March	849	3,779,523	110,110	3,974,173	318,505	698,873	46,792	1,239,161	2,408,972	60.6	1,565,201	875,033	834,106	716,187
	3 mos.	849	9,620,393	302,812	10,160,927	919,209	2,025,307	132,885	3,442,708	6,835,831	67.3	3,325,096	2,132,758	2,002,173	1,674,281
Delaware, Lackawanna & Western	March	985	4,464,029	611,773	5,594,393	425,594	891,935	111,268	2,317,822	3,897,743	69.7	1,696,650	833,650	824,163	867,072
	3 mos.	985	12,580,408	1,832,423	15,859,768	1,165,705	2,629,024	333,129	6,863,014	11,443,839	72.2	4,415,929	2,041,929	1,882,565	2,371,915
Denver & Rio Grande Western	March	2,431	2,969,798	233,015	3,386,273	234,111	754,330	85,691	1,138,627	2,324,819	68.7	1,061,454	832,178	799,916	176,562
	3 mos.	2,431	8,319,658	630,688	9,396,613	619,406	1,973,027	263,770	3,435,733	6,633,791	70.6	2,762,822	2,083,692	1,974,441	358,426
Denver & Salt Lake	March	232	163,805	5,854	178,346	20,145	45,554	2,861	64,822	142,682	80.0	35,664	10,531	59,611	58,938
	3 mos.	232	591,025	18,557	636,791	52,945	135,620	8,196	219,831	446,167	70.1	190,624	114,967	255,108	219,080
Detroit & Mackinac	March	242	62,181	3,059	73,460	8,948	12,916	722	27,028	52,776	71.8	20,684	17,183	12,669	—5,559
	3 mos.	242	168,426	10,151	202,198	23,347	36,480	2,213	81,146	152,997	75.7	49,201	38,677	25,123	—17,378
Detroit & Toledo Shore Line	March	50	362,574	.....	363,371	24,884	28,627	9,245	98,648	170,194	46.8	193,177	130,783	69,816	131,351
	3 mos.	50	1,157,699	.....	1,160,168	65,997	81,603	27,437	305,734	505,400	43.6	654,768	444,663	256,043	366,097
Detroit, Toledo & Ironton	March	465	778,723	333	810,865	78,989	129,023	14,482	194,852	440,601	54.3	370,264	219,142	196,738	346,328
	3 mos.	465	2,289,751	959	2,395,710	231,220	353,017	40,549	568,140	1,261,878	52.7	1,133,832	683,302	605,079	952,482
Duluth, Missabe & Iron Range	March	543	613,838	1,663	699,277	240,143	333,962	3,946	325,176	937,567	134.1	—238,290	—332,296	—337,588	—797,588
	3 mos.	542	853,108	3,763	990,922	625,006	982,957	12,089	735,038	2,461,574	248.4	—1,470,652	—1,687,606	—1,708,774	—2,396,326
Duluth, Winnipeg & Pacific	March	175	181,800	900	185,800	30,406	27,564	2,035	71,214	134,960	72.6	50,840	36,345	12,600	891
	3 mos.	175	538,700	2,700	551,200	82,888	79,051	6,017	213,229	391,269	71.0	159,931	117,393	49,027	28,775
Elgin, Joliet & Eastern	March	392	2,456,502	2	2,763,100	176,502	533,977	17,023	962,250	1,737,802	62.9	1,025,298	482,672	358,912	687,390
	3 mos.	392	6,963,116	43	7,833,906	507,450	1,501,192	49,635	2,848,708	5,102,497	65.1	2,731,409	1,290,167	863,905	1,867,874
Erie	March	2,251	9,552,130	455,094	10,628,982	810,018	1,822,550	195,034	3,702,420	6,849,199	64.4	3,779,783	2,014,768	1,662,787	1,708,095
	3 mos.	2,251	26,283,997	1,327,127	29,231,883	2,341,436	5,173,107	585,909	10,805,545	19,851,091	67.9	9,380,792	5,485,698	4,436,587	4,782,479
Florida East Coast	March	685	1,009,332	542,719	1,721,025	116,673	180,456	36,158	547,271	973,311	56.6	747,714	667,824	620,422	413,594
	3 mos.	685	2,576,414	1,499,667	4,521,466	384,070	559,958	103,455	1,514,161	2,834,492	62.7	1,686,974	1,449,987	1,297,773	1,136,246
Georgia Railroad	March	329	563,235	60,243	658,371	51,523	77,817	21,696	235,012	403,883	61.3	254,488	234,151	232,425	99,520
	3 mos.	329	1,550,838	180,373	1,823,505	144,626	218,061	63,391	662,341	1,137,163	62.4	686,342	626,937	608,005	270,709
Georgia & Florida	March	408	137,884	4,884	147,815	35,944	20,227	10,118	50,536	123,206	83.4	24,609	15,474	4,989	141
	3 mos.	408	422,363	8,721	446,560	103,222	61,746	30,134	149,398	363,584	81.4	82,976	55,895	25,272	—8,863
Grand Trunk Western	March	1,026	2,023,000	115,000	2,290,000	309,378	469,425	38,805	970,812	1,869,008	81.6	420,992	275,937	206,352	711,647
	3 mos.	1,026	6,049,000	318,000	6,808,000	921,524	1,389,893	114,492	2,922,102	5,577,816	81.9	1,230,184	797,645	576,685	1,637,247
Canadian National Lines in New England	March	172	277,400	3,400	299,200	52,947	41,352	2,505	142,344	254,375	85.0	44,825	26,305	—45,829	—9,715
	3 mos.	172	722,700	9,900	790,700	149,145	105,728	7,531	342,440	646,467	81.8	144,233	88,673	—109,477	—101,519
Great Northern	March	8,077	8,954,163	442,327	10,097,440	1,282,206	2,098,615	199,064	3,154,263	7,008,900	69.4	3,088,540	1,395,546	1,224,503	739,416
	3 mos.	8,077	24,728,755	1,298,228	27,901,650	3,429,585	6,246,638	574,824	9,282,077	20,423,077	73.2	7,478,573	3,668,645	3,292,111	809,843
Green Bay & Western	March	234	190,468	200	196,202	34,733	20,179	8,497	57,012	124,950	63.6	71,252	52,637	42,931	30,062
	3 mos.	234	529,013	721	545,041	83,074	62,258	26,684	167,991	356,466	65.4	188,575	133,258	105,149	84,762
Gulf & Ship Island	March	259	166,807	19,926	201,403	26,305	16,499	2,998	65,160	117,859	58.5	83,544	64,480	51,150	19,986
	3 mos.	259	423,291	52,903	513,138	68,081	67,513	9,174	196,800	360,729	70.3	152,409	94,967	57,350	4,401

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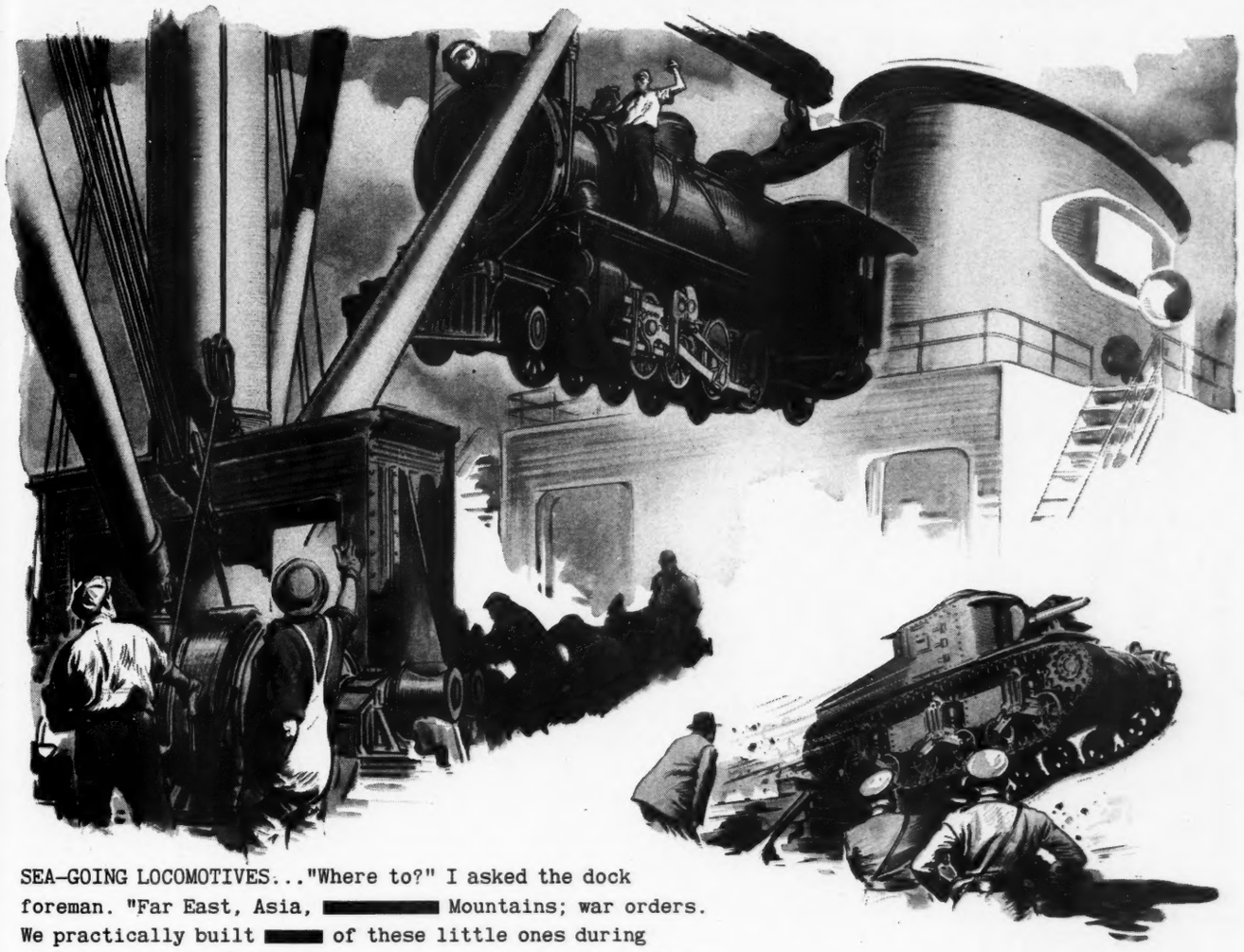
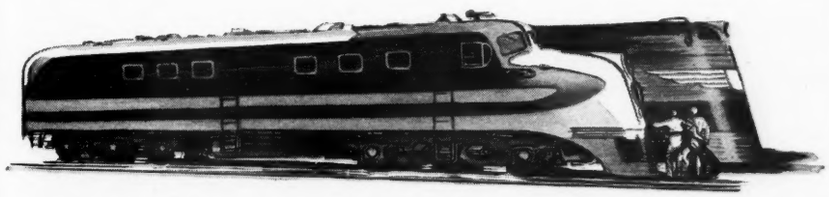
AMERICAN NOTES . . . . . by Raymond Gram Swing

Report from a national arsenal of mobile power



SEA-GOING LOCOMOTIVES..."Where to?" I asked the dock foreman. "Far East, Asia, [redacted] Mountains; war orders. We practically built [redacted] of these little ones during the noon hour! Don't look so surprised. We build locomotives of all kinds, all sizes, and by the hundreds...been at it a hundred years, know how to do it."

ON THE PROVING GROUND...Tanks, lots of tanks, wheeling and jumping like cavalry! Believe me, special skills and 100 years of engineering experience are worth plenty...these days! And when they told me how many, I felt good. I felt very good.



IN THE ASSEMBLY YARDS..."Which is which?" I asked the super. "Don't blame you for not knowing," was the answer. "Both streamlined to the ears! Near one is Diesel-Liner, other is Steam-Liner." Each is an ultra-modern power source, speeding record-making, wartime traffic over U. S. rails.

IN THE MACHINE SHOP..."What's that?" I asked. "Roller-bearing for a battle-ship turret, machined as fine as a watch part," was the answer. No wonder our American warships have an edge. Equipment like this means everything in active service.

AMERICAN LOCOMOTIVE

MANUFACTURERS OF MOBILE POWER

STEAM, DIESEL AND ELECTRIC LOCOMOTIVES
MARINE DIESELS, TANKS
GUN CARRIAGES AND OTHER ORDNANCE

[redacted] Sorry we can't be more explicit. Revelation of details might be of aid to the enemy...endanger American lives.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1942	1941
Gulf, Mobile & Ohio	March	1,969	$2,064,465	$77,343	$2,232,430	$342,038	$389,499	$89,457	$665,174	$1,583,981	71.0	$648,449	$428,149	$300,100	$346,268
	3 mos.	1,969	5,874,593	177,790	6,297,845	968,152	1,060,739	266,082	1,931,859	4,522,496	71.8	1,775,349	1,171,149	796,488	816,482
Illinois Central	March	4,950	11,365,422	1,336,906	13,483,158	1,199,714	2,891,290	221,058	4,259,874	9,018,276	66.9	4,464,882	2,250,491	1,974,470	2,678,251
	3 mos.	4,950	31,381,611	3,873,355	37,430,283	3,488,879	8,077,094	683,726	12,547,917	26,111,048	69.8	11,319,235	5,902,830	5,470,409	6,642,397
Yazoo & Mississippi Valley	March	1,550	2,352,081	122,574	2,571,732	137,464	317,511	35,902	719,338	1,274,565	49.6	1,297,167	1,133,829	1,044,624	275,197
	3 mos.	1,550	6,212,816	370,940	6,847,603	422,599	828,476	110,358	2,088,439	3,636,017	53.1	3,211,586	2,727,619	2,490,590	352,134
Illinois Central System	March	6,500	13,717,503	1,459,480	16,054,890	1,337,178	3,208,801	256,960	4,979,212	10,292,841	64.1	5,762,049	3,379,265	3,025,006	2,962,361
	3 mos.	6,500	37,594,427	4,244,295	44,277,886	3,911,478	8,905,570	794,084	14,636,356	29,747,065	67.2	14,530,821	8,615,286	7,978,737	7,021,270
Illinois Terminal	March	476	488,767	100,350	644,785	56,997	96,096	18,454	214,465	405,147	62.83	239,638	166,981	150,064	117,525
	3 mos.	476	1,393,674	270,706	1,830,623	160,573	261,095	54,975	620,600	1,154,481	63.06	676,142	456,309	402,190	305,460
Kansas City Southern	March	880	2,005,972	162,528	2,315,054	255,829	318,458	57,601	599,916	1,305,549	56.4	1,009,505	801,505	632,128	391,746
	3 mos.	880	5,074,676	411,023	5,903,352	712,406	883,693	165,134	1,658,360	3,638,858	61.6	2,264,494	1,760,494	1,373,764	1,019,483
Kansas, Oklahoma & Gulf	March	328	204,854	498	207,942	18,730	13,514	9,657	52,945	107,928	51.9	100,014	63,292	43,322	86,077
	3 mos.	328	603,206	1,401	612,696	45,143	36,487	29,059	160,564	309,007	50.4	303,689	197,629	137,979	242,211
Lake Superior & Ishpeming	March	156	136,557	89	167,194	26,561	41,431	700	42,347	118,974	71.2	48,220	22,055	28,091	—70,752
	3 mos.	156	206,962	197	243,205	65,618	128,099	1,842	93,375	312,932	128.7	—69,727	—146,769	—127,830	—198,914
Lehigh & Hudson River	March	96	307,949	.....	308,614	20,959	33,234	4,684	83,304	150,017	48.6	158,597	97,606	53,529	30,987
	3 mos.	96	802,104	.....	804,046	58,907	94,254	13,996	232,297	421,390	52.4	382,656	216,250	127,964	79,877
Lehigh & New England	March	190	430,429	.....	432,785	39,625	101,828	7,779	144,188	311,149	71.9	121,636	75,118	88,226	108,960
	3 mos.	190	1,240,472	.....	1,247,563	110,942	275,032	23,222	406,678	867,314	69.5	380,249	234,016	266,026	305,084
Lehigh Valley	March	1,263	5,195,238	211,745	5,758,768	447,658	948,564	106,888	2,222,295	3,875,271	67.3	1,883,497	1,348,547	1,021,611	901,245
	3 mos.	1,263	13,821,156	644,329	15,363,097	1,160,485	2,692,097	317,960	6,539,233	11,178,628	72.8	4,184,469	2,775,895	1,796,464	2,535,318
Louisiana & Arkansas	March	877	953,893	58,241	1,054,004	142,139	128,565	30,490	263,806	613,377	58.2	440,627	279,375	224,149	186,950
	3 mos.	877	2,654,658	154,766	2,927,683	422,165	371,944	96,989	770,218	1,791,070	61.2	1,136,613	742,195	583,095	513,181
Louisville & Nashville	March	4,798	10,211,014	1,299,697	12,176,307	1,181,277	2,263,632	194,803	3,762,448	7,761,029	63.7	4,415,278	1,935,982	2,112,956	2,175,400
	3 mos.	4,798	28,204,194	3,473,417	33,495,813	3,467,297	6,593,053	597,397	11,124,711	22,838,219	68.2	10,657,594	4,928,531	5,479,394	5,859,548
Maine Central	March	991	1,377,028	148,805	1,613,147	181,757	271,645	14,925	535,439	1,045,964	64.8	567,183	347,615	287,407	278,002
	3 mos.	991	3,726,336	369,171	4,372,456	515,829	780,823	37,349	1,527,650	2,989,484	68.4	1,382,972	858,748	690,836	734,411
Midland Valley	March	351	100,107	8	102,328	13,992	10,810	2,614	34,051	68,047	66.5	34,281	23,291	13,725	28,213
	3 mos.	351	338,171	14	345,466	33,614	28,029	7,798	110,366	200,662	58.1	144,804	107,417	71,079	93,408
Minneapolis & St. Louis	March	1,409	1,098,791	17,409	1,158,459	154,328	149,138	58,444	350,522	758,948	65.5	399,511	342,041	304,752	102,968
	3 mos.	1,409	3,079,127	58,874	3,256,395	340,120	443,459	168,948	1,060,185	2,144,352	65.9	1,112,043	948,538	831,191	229,314
Minneapolis, St. Paul & Sault Ste. Marie	March	4,277	2,923,399	77,524	3,184,055	357,995	588,514	64,795	1,239,916	2,351,899	73.9	832,156	554,446	482,489	99,703
	3 mos.	4,277	8,090,676	219,552	8,808,846	1,026,243	1,616,729	199,023	3,656,119	6,799,085	77.2	2,009,761	1,266,718	1,021,244	183,258
Duluth, South Shore & Atlantic	March	550	262,252	11,655	288,933	41,297	52,870	8,074	119,356	228,016	78.9	60,917	41,776	30,693	17,979
	3 mos.	550	762,408	31,520	836,123	114,999	159,295	25,125	335,626	655,068	78.3	181,055	129,158	110,295	32,883
Spokane International	March	152	76,009	1,932	86,602	14,229	8,342	2,501	28,531	58,675	67.8	27,927	19,754	15,881	3,809
	3 mos.	152	204,557	3,120	231,166	45,553	24,109	7,567	77,763	168,765	73.0	62,401	43,423	31,403	19,628
Mississippi Central	March	158	110,364	1,923	113,331	19,800	13,369	8,170	26,805	72,643	64.1	40,688	33,982	27,087	24,726
	3 mos.	158	312,163	7,814	322,746	62,577	38,686	23,977	80,156	218,734	67.8	104,012	85,635	66,358	66,575
Missouri & Arkansas	March	365	121,357	1,633	130,298	22,324	14,379	7,187	46,360	94,734	72.7	35,564	30,459	17,745	20,558
	3 mos.	365	338,323	4,850	371,444	70,321	41,268	22,454	143,525	292,567	78.8	78,877	63,980	26,500	35,868
Missouri-Illinois	March	172	244,784	237	246,201	32,673	35,793	3,556	60,271	135,297	55.0	110,904	60,493	47,443	52,906
	3 mos.	172	650,498	631	654,852	68,421	93,982	10,304	172,768	361,188	55.2	293,664	170,221	133,768	156,977
Missouri-Kansas-Texas Lines	March	3,293	3,140,998	401,897	3,855,029	441,670	565,234	121,881	1,265,849	2,566,307	66.6	1,288,722	1,015,151	736,892	347,641
	3 mos.	3,293	8,371,495	1,370,479	10,608,165	1,181,584	1,697,605	367,043	3,698,946	7,421,355	70.0	3,186,810	2,520,941	1,717,948	721,386
Missouri Pacific	March	7,136	9,722,784	1,011,696	11,643,862	1,342,033	1,875,387	273,258	3,826,128	7,682,664	66.0	3,961,198	3,354,889	2,756,930	1,453,233
	3 mos.	7,136	26,672,352	3,078,391	32,273,517	3,492,130	5,382,076	811,797	11,029,111	21,769,982	67.5	10,503,535	8,738,049	7,167,196	4,424,972
Gulf Coast Lines	March	1,772	2,564,965	105,926	2,764,281	305,306	254,767	45,022	718,168	1,390,663	50.3	1,373,618	1,278,017	1,009,681	383,203
	3 mos.	1,772	6,897,456	258,284	7,416,061	828,465	729,207	140,718	1,957,364	3,849,438	51.9	3,566,623	3,289,300	2,580,680	1,006,246
International Great Northern	March	1,155	1,202,821	140,775	1,479,743	208,131	255,644	31,903	541,697	1,102,702	74.5	377,041	304,251	224,011	82,415
	3 mos.	1,155	3,211,240	384,091	3,988,775	606,552	750,250	94,450	1,559,990	3,205,993	80.4	782,782	569,106	354,536	154,894
Monongahela	March	172	612,519	619	615,066	55,473	48,577	602	135,136	243,260	39.6	371,806	266,933	169,129	202,085
	3 mos.	172	1,684,910	1,681	1,693,027	146,310	135,302	1,641	402,951	695,872	41.1	997,155	683,565	396,015	414,205

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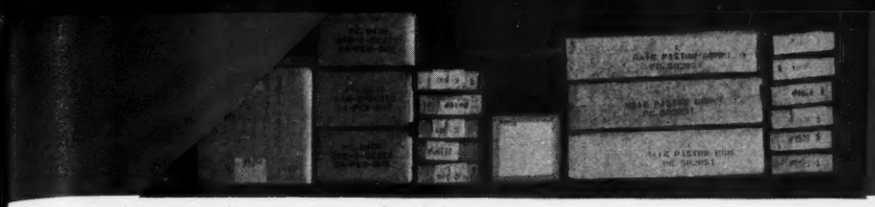
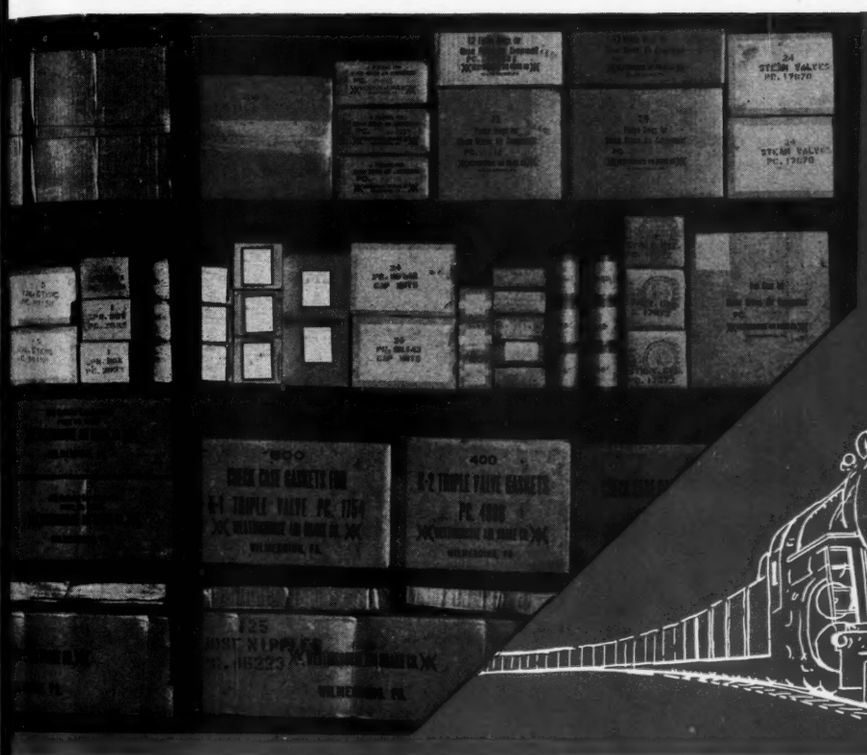


Now — AS NEVER BEFORE,



Are STANDARD PARTS *Important*

TO KEEP railroad equipment up to par is a recognized essential in meeting today's intensive requirements . . . Since efficient Air Brakes are vital to satisfactory train operation, the necessity of sustaining the reliability of detail apparatus is even more urgent than ever before. A major help to this end is to have a stock of Westinghouse standard packaged parts of all air brake devices on hand for meeting repair needs. Being exact duplicates of the replaced details in every respect, they require a minimum of time and labor to install, and give the same trouble-free and lasting service as the originals . . . Sturdy cartons, trade marked for ready identification, provide for shipping protection, convenient storage, and easy handling . . . The way to true maintenance economy is marked by the exclusive use of "genuine" Westinghouse repair parts.

WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNSYLVANIA

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of—Way and structures	Maintenance of—Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income: 1942	1941
Montour	March	51	$203,259	$.....	$204,794	$12,034	$49,194	$895	$61,593	$131,160	64.0	$73,634	$25,247	$54,872	$74,307
	3 mos.	51	525,021	.....	530,134	33,176	154,811	2,501	166,909	379,210	71.5	150,924	28,681	135,548	190,796
Nashville, Chattanooga & St. Louis	March	1,111	1,592,020	217,294	1,981,159	232,337	399,203	74,416	737,443	1,515,953	76.5	465,206	275,490	254,011	329,119
	3 mos.	1,111	4,394,409	638,662	5,518,668	663,765	1,099,503	223,033	2,169,467	4,361,109	79.0	1,157,559	681,900	639,044	732,657
Nevada Northern	March	165	58,306	542	61,534	8,672	3,868	1,233	9,713	30,122	49.0	31,412	12,215	13,409	32,363
	3 mos.	165	164,155	1,835	173,846	25,842	9,976	3,614	29,127	87,210	50.2	86,636	33,685	38,226	52,122
New York Central	March	10,915	33,767,627	6,588,403	44,362,011	4,204,263	9,146,660	611,647	16,011,342	31,614,218	71.3	12,747,793	6,773,674	5,487,795	5,593,738
	3 mos.	10,917	91,389,571	19,727,968	121,990,496	12,282,604	26,331,840	1,783,132	47,279,690	92,627,522	75.9	29,362,974	15,934,127	12,325,606	14,330,031
Pittsburgh & Lake Erie	March	232	2,452,656	61,873	2,587,413	223,058	736,056	40,986	800,334	1,899,520	73.4	687,893	113,136	525,443	598,845
	3 mos.	232	6,863,002	178,266	7,239,205	659,107	2,417,534	121,049	2,330,215	5,822,581	80.4	1,416,624	—10,967	1,218,237	1,557,659
New York, Chicago & St. Louis	March	1,688	6,658,213	115,623	6,892,702	500,986	824,459	128,865	2,116,049	3,713,236	53.9	3,179,466	1,991,796	1,447,575	1,370,847
	3 mos.	1,688	17,248,522	351,454	17,955,629	1,481,880	2,339,342	392,884	6,031,180	10,668,115	59.4	7,287,514	5,011,544	3,674,433	3,367,515
New York, New Haven & Hartford	March	1,839	7,352,818	3,240,327	11,516,954	1,059,115	1,627,581	126,970	3,839,426	7,236,740	62.8	4,280,214	3,154,214	2,263,345	1,280,654
	3 mos.	1,839	19,231,264	9,684,865	31,464,142	3,096,766	4,736,005	356,543	11,289,946	21,017,875	66.8	10,446,267	7,420,267	4,789,237	3,177,697
New York Connecting	March	21	248,909	.....	264,552	65,692	12,200	.....	46,045	cr. 5,828	...	270,380	225,120	274,979	303,307
	3 mos.	21	671,673	.....	706,256	60,077	32,903	.....	118,054	215,717	30.5	490,539	354,759	508,495	784,802
New York, Ontario & Western	March	547	528,485	3,396	572,133	56,980	105,661	20,278	301,802	504,385	88.2	67,748	36,259	—8,781	—34,706
	3 mos.	547	1,407,983	20,653	1,543,864	168,800	310,946	55,792	840,513	1,438,614	93.2	105,250	15,992	—88,725	—167,519
New York, Susquehanna & Western	March	262	293,676	35,428	341,246	25,270	30,950	2,184	135,719	204,642	60.0	136,604	106,146	74,431	53,373
	3 mos.	262	794,617	97,565	948,734	73,359	95,024	6,954	403,985	612,630	64.6	336,104	244,652	142,393	149,619
Norfolk & Western	March	2,181	10,188,561	383,268	10,856,522	1,227,380	2,169,001	155,587	2,385,955	6,203,896	57.1	4,652,626	1,121,060	1,504,239	3,256,868
	3 mos.	2,181	28,538,747	1,122,206	30,487,544	3,214,004	6,295,154	475,505	7,006,062	17,792,232	58.4	12,695,312	3,869,584	5,201,382	8,810,549
Norfolk Southern	March	733	524,879	10,259	554,336	94,939	66,262	28,130	182,961	397,584	71.7	156,752	109,264	89,190	40,967
	3 mos.	733	1,422,495	23,466	1,495,940	285,313	194,616	81,266	521,526	1,157,640	77.4	338,300	218,423	159,521	85,651
Northern Pacific	March	6,889	7,120,831	469,882	8,217,137	993,315	1,777,259	172,355	2,734,472	6,033,818	73.4	2,183,319	1,278,403	1,719,018	1,228,132
	3 mos.	6,889	19,922,230	1,328,718	23,016,791	2,743,393	5,134,233	496,473	7,882,502	17,297,005	75.2	5,719,786	3,072,971	4,281,101	2,484,379
Northwestern Pacific	March	345	303,007	6,943	329,668	92,906	52,268	2,527	142,611	297,425	90.2	32,243	10,422	—7,865	—40,976
	3 mos.	345	841,673	19,921	911,547	294,606	149,554	7,799	396,246	869,645	95.4	41,902	—26,728	—71,577	—153,247
Oklahoma City-Ada-Atoka	March	132	102,794	.....	103,607	12,308	5,883	997	22,193	43,882	42.4	59,725	39,505	29,705	—747
	3 mos.	132	251,155	.....	256,031	32,158	9,613	2,703	59,695	110,811	43.3	145,220	96,574	66,734	—3,506
Pennsylvania	March	10,215	46,209,132	10,488,392	60,957,895	6,448,754	12,844,767	827,844	23,224,944	45,240,550	74.2	15,717,345	7,600,448	6,588,056	6,985,858
	3 mos.	10,215	126,100,222	30,198,627	168,152,353	17,724,256	37,242,729	2,363,727	65,885,272	128,512,409	76.4	39,639,944	18,285,962	15,136,986	19,066,148
Long Island	March	378	936,884	1,478,732	2,540,347	326,571	432,901	9,420	1,191,907	2,014,781	79.3	525,566	272,036	95,241	87,951
	3 mos.	378	2,432,789	4,144,416	6,942,553	868,057	1,192,859	27,598	3,412,961	5,673,308	81.7	1,269,245	566,226	32,063	57,640
Pennsylvania-Reading Seashore Lines	March	406	424,131	124,096	575,002	102,746	104,082	7,154	346,539	577,297	100.4	—2,295	—93,541	—180,097	—226,607
	3 mos.	406	1,203,570	321,152	1,599,968	283,137	301,927	21,312	1,012,011	1,672,676	104.5	—72,708	—335,331	—582,295	—603,916
Pere Marquette	March	2,055	3,057,519	103,114	3,302,649	407,186	713,860	69,976	1,263,951	2,568,086	77.8	734,563	439,095	394,454	584,617
	3 mos.	2,055	8,661,902	324,926	9,373,612	1,202,909	2,104,599	205,480	3,723,120	7,573,224	80.8	1,800,388	1,027,617	998,317	1,668,397
Pittsburg & Shawmut	March	97	86,472	.....	86,757	7,179	19,695	2,156	23,216	56,969	65.7	29,788	26,727	25,639	28,756
	3 mos.	97	253,525	.....	255,036	24,303	57,865	6,147	69,817	171,667	67.3	83,369	74,403	72,220	46,320
Pittsburgh & West Virginia	March	136	424,951	.....	443,198	51,651	97,144	19,403	102,354	293,762	66.3	149,436	106,300	125,486	163,077
	3 mos.	136	1,245,420	70	1,302,189	138,726	286,104	57,944	294,755	853,140	65.5	449,049	319,536	382,313	379,406
Pittsburg, Shawmut & Northern	March	190	133,623	.....	135,070	17,860	29,210	1,270	45,123	99,175	73.4	35,895	29,059	20,429	30,988
	3 mos.	190	375,310	.....	380,879	55,401	86,997	3,469	139,745	302,265	79.4	78,614	58,033	36,330	113,281
Reading	March	1,430	7,461,788	476,794	8,268,514	540,800	1,633,113	75,284	2,817,644	5,240,446	63.4	3,028,068	1,902,549	1,645,875	1,495,587
	3 mos.	1,431	19,852,462	1,321,708	22,135,178	1,615,096	4,809,365	223,611	7,988,891	15,162,060	68.5	6,973,118	4,222,098	3,666,872	4,018,609
Richmond, Fredericksburg & Potomac	March	118	1,124,643	750,808	2,077,059	123,398	205,224	10,623	558,757	971,997	46.8	1,105,062	593,878	460,023	296,466
	3 mos.	118	2,920,396	1,983,023	5,390,408	308,504	586,131	31,616	1,565,569	2,710,866	50.3	2,679,542	1,419,777	1,085,345	647,010
Rutland	March	407	245,063	36,763	345,028	34,226	69,055	11,815	159,934	286,462	83.0	58,566	37,390	40,027	11,391
	3 mos.	407	699,059	105,253	975,570	104,621	198,377	31,041	472,275	839,204	86.0	136,366	77,616	85,398	—37,083
St. Louis-San Francisco	March	4,765	4,860,006	731,763	6,043,541	647,339	1,116,034	131,958	2,135,506	4,268,999	70.6	1,774,542	1,399,000	1,478,312	959,322
	3 mos.	4,766	13,301,761	1,957,928	16,524,420	1,850,714	3,203,076	390,571	6,126,613	12,262,035	74.2	4,262,385	3,313,369	3,569,649	2,484,697
St. Louis, San Francisco & Texas	March	159	165,175	4,620	175,232	24,268	21,230	9,196	75,356	135,576	77.4	39,656	29,013	2,758	2,705
	3 mos.	159	501,622	6,594	523,885	72,959	61,123	25,860	203,923	381,322	72.8	142,563	113,823	36,042	—19,519

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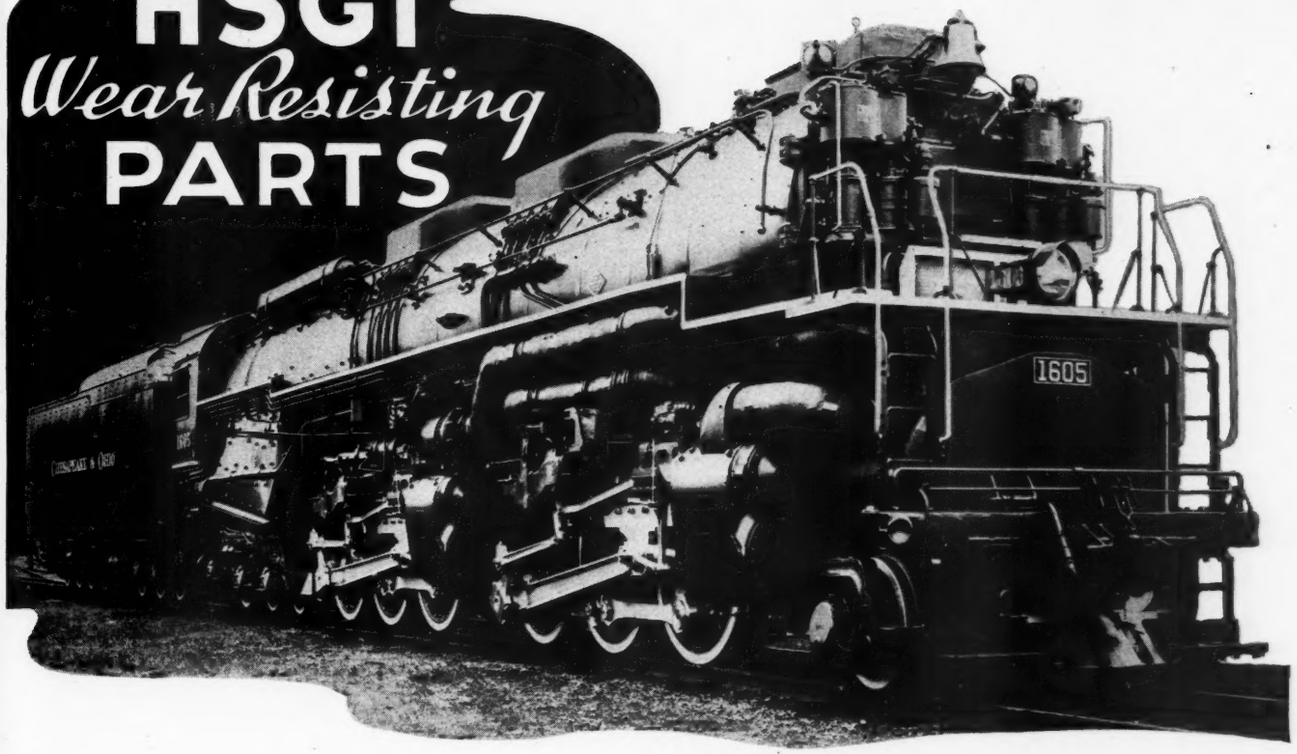
HSGI
Wear Resisting PARTS



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HUNT-SPILLER GUN IRON
Air Furnace

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1942	Net railway operating income 1941
St. Louis Southwestern Lines	March	1,617	$3,473,213	$165,792	$3,730,605	$340,505	$373,227	$96,184	$958,963	$1,863,591	50.0	$1,867,014	$1,133,660	$909,351	$715,368
	3 mos.	1,617	8,502,193	399,599	9,170,693	937,026	1,046,837	286,908	2,597,470	5,151,405	56.2	4,019,288	2,485,411	1,929,607	1,630,341
Seaboard Air Line	March	4,305	5,626,464	2,003,464	8,152,338	958,616	1,207,074	211,831	2,540,735	5,258,229	64.5	2,894,109	2,469,109	2,152,559	1,261,824
	3 mos.	4,306	15,125,976	5,113,512	21,633,212	2,735,606	3,552,691	636,653	7,311,054	15,211,659	70.3	6,421,553	5,246,553	4,395,301	2,802,842
Southern Railway	March	6,519	11,923,281	1,618,105	14,440,528	1,632,972	2,393,328	195,479	4,393,152	9,070,500	62.8	5,370,028	2,984,980	2,751,925	2,803,296
	3 mos.	6,519	32,636,638	4,936,128	40,002,756	4,691,581	6,973,999	584,549	12,669,307	26,234,156	65.6	13,768,600	7,903,602	7,266,019	7,224,476
Alabama Great Southern	March	315	1,168,247	141,926	1,389,467	115,439	199,264	20,009	384,476	758,325	54.6	631,142	229,457	174,359	198,588
	3 mos.	315	2,941,186	437,964	3,581,620	323,373	596,159	60,051	1,040,738	2,127,926	59.4	1,453,694	595,096	507,251	475,519
Cincinnati, New Orleans & Texas Pacific	March	337	2,024,920	228,064	2,362,576	239,945	437,027	32,129	551,437	1,330,008	56.3	1,032,568	494,945	494,826	539,846
	3 mos.	337	5,273,937	731,666	6,301,311	691,413	1,341,898	94,520	1,571,357	3,906,612	62.0	2,394,699	1,206,070	1,248,393	1,512,102
Georgia Southern & Florida	March	398	269,359	109,923	410,534	55,524	44,839	3,080	133,012	249,625	60.8	160,909	100,707	73,494	80,563
	3 mos.	398	695,617	284,498	1,063,600	168,210	144,086	7,415	364,334	718,277	67.5	345,323	235,100	161,752	217,121
New Orleans & Northeastern	March	204	666,182	81,913	788,243	64,252	56,426	9,708	222,399	377,392	47.9	410,851	169,356	89,827	90,137
	3 mos.	204	1,616,586	269,374	1,990,029	171,099	160,895	29,917	543,082	972,943	48.9	1,017,086	485,879	318,428	253,460
Southern Pacific	March	8,573	21,553,203	3,469,788	26,951,257	2,340,828	4,725,244	425,678	8,878,768	17,651,687	65.5	9,299,570	5,350,158	4,103,534	3,633,944
	3 mo.	8,574	59,556,561	9,083,387	73,930,674	6,758,246	11,868,300	1,174,265	25,096,279	48,518,949	65.6	25,411,725	16,589,147	13,217,938	8,779,425
Southern Pacific Steamship Lines	March	....	776	57	1,231	27,974	407	136	15,045	45,549	In excess	—44,318	—44,266	—44,266	62,517
	3 mos.	....	7,004	159	7,458	78,117	cr. 420	137	47,355	136,995	of 999	—129,537	—130,015	—130,015	188,678
Texas & New Orleans	March	4,402	6,393,613	642,988	7,402,045	837,686	924,027	148,680	1,971,432	4,142,427	56.0	3,259,618	2,025,498	1,626,328	793,488
	3 mos.	4,412	16,666,096	1,771,798	19,494,168	2,492,449	2,620,366	421,374	5,511,828	11,796,320	60.5	7,697,848	4,891,795	3,814,910	2,310,617
Spokane, Portland & Seattle	March	939	1,334,932	47,739	1,456,336	181,447	113,316	12,422	425,747	769,796	52.9	686,540	586,240	466,974	186,583
	3 mos.	939	3,557,701	123,958	3,871,481	467,336	330,630	34,459	1,258,364	2,205,985	57.0	1,665,496	1,373,758	1,038,526	418,676
Tennessee Central	March	286	286,378	7,329	309,876	71,045	47,764	7,158	104,864	243,620	78.6	66,256	55,295	38,005	36,463
	3 mos.	286	776,307	21,862	843,843	184,801	134,020	22,070	302,415	680,482	80.6	163,361	113,542	75,036	107,416
Texas & Pacific	March	1,889	2,589,673	556,311	3,450,782	415,932	581,166	82,717	1,030,431	2,294,100	66.5	1,156,682	787,791	679,094	562,283
	3 mos.	1,889	7,278,401	1,598,182	9,692,921	1,175,074	1,705,576	248,479	2,991,133	6,601,250	68.1	3,091,671	2,119,835	1,793,030	1,529,456
Texas Mexican	March	162	144,313	486	165,172	20,658	14,351	3,722	41,901	88,555	53.6	76,617	69,190	59,948	33,042
	3 mos.	162	347,935	1,296	405,196	60,595	39,757	11,069	119,585	254,958	62.9	150,238	128,536	107,369	54,407
Toledo, Peoria & Western	March	239	179,127	8	182,035	21,034	17,382	16,735	63,589	129,564	71.2	52,471	38,822	29,140	28,762
	3 mos.	239	416,344	9	424,161	65,689	51,135	48,656	208,988	414,464	97.7	9,697	—31,859	—61,081	98,010
Union Pacific System	March	9,871	18,767,846	2,314,474	22,599,901	3,376,113	4,580,896	425,037	6,839,380	16,191,776	71.6	6,408,125	2,973,882	2,299,569	1,962,337
	3 mos.	9,871	50,973,567	6,395,649	61,703,964	7,005,277	12,678,662	1,228,662	20,599,337	44,342,962	71.9	17,361,002	9,093,759	7,071,654	3,664,577
Utah	March	111	103,829	.....	103,898	14,531	32,019	464	27,601	78,776	75.8	25,122	11,616	13,677	16,473
	3 mos.	111	320,291	.....	320,469	49,724	96,180	1,384	87,017	247,136	77.1	73,333	30,876	27,290	32,218
Virginian	March	653	2,232,847	3,591	2,309,672	192,931	467,917	25,267	411,575	1,144,622	49.6	1,165,050	625,050	635,111	981,986
	3 mos.	653	6,669,537	9,539	6,902,022	559,884	1,402,927	77,916	1,245,817	3,425,461	49.6	3,476,561	1,869,061	1,904,147	2,961,641
Wabash	March	2,394	5,023,656	315,646	5,660,638	595,420	744,545	161,907	1,953,618	3,649,387	64.5	2,011,251	1,109,580	784,229	941,820
	3 mos.	2,399	13,639,061	959,360	15,546,023	1,610,574	2,153,774	480,582	5,700,046	10,447,061	67.2	5,098,962	2,974,690	1,984,553	2,208,224
Ann Arbor	March	294	419,200	2,213	429,524	36,562	82,521	15,346	186,642	335,757	78.2	93,767	43,286	28,192	50,702
	3 mos.	294	1,206,769	6,835	1,235,977	105,122	240,527	45,555	548,005	974,465	78.8	261,512	153,028	105,485	152,948
Western Maryland	March	859	2,204,700	8,666	2,268,894	199,845	511,282	46,576	612,695	1,437,513	63.4	831,381	491,381	521,877	670,431
	3 mos.	859	6,077,378	27,256	6,285,963	597,265	1,418,686	136,842	1,718,311	4,067,191	64.7	2,218,772	1,378,772	1,451,637	1,703,270
Western Pacific	March	1,195	2,466,562	126,189	2,656,303	286,856	365,801	71,288	919,220	1,714,919	64.6	941,384	821,003	692,053	206,073
	3 mos.	1,195	6,617,417	301,149	7,091,387	851,113	1,066,633	220,395	2,708,991	5,066,611	71.4	2,024,776	1,635,769	1,236,286	424,169
Wheeling & Lake Erie	March	507	1,708,334	4	1,773,820	227,908	335,659	42,509	535,301	1,182,944	66.7	590,876	25,071	185,562	398,067
	3 mos.	507	4,716,336	5	4,898,419	561,136	1,005,131	122,307	1,530,729	3,331,126	68.0	1,567,293	148,901	632,898	1,106,372

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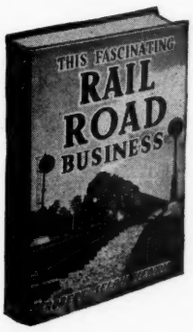

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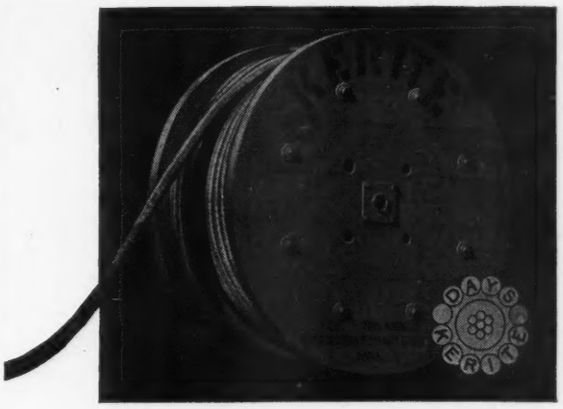

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